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ORIGINAL COMMUNICATIONS.

On the Therapeutical Properties of Iodine. By J. K. Mitchell, M. D., Professor of the Practice of Medicine in Jefferson Medical College, etc.

Perhaps no medicine has been so much praised and condemned as iodine and its preparations. While some practitioners depend almost indiscriminately on its remedial efficacy, others, of not less reputation and experience, declare that they have yet to see one case in which it has unequivocally manifested any useful property. Some, indeed, have asserted that iodine in any form is only hurtful, having power only for evil. Destroyed mucous tissues, obstructed glands, incurable chronic gastritis, and intense and unmanageable cephalalgia are a few of the mischievous effects alleged to belong to the use of iodine. Its advocates, on the other hand, give apparently enormous doses without any apprehension of injurious consequences, and boldly declare that nothing but good has resulted from their administration.

My own observation and frequent conferences with many judicious physicians, induce me to place myself in an intermediate position, and to assume the ground that iodine is not only a useful article of the materia medica, but a very great addition to our means of cure. I am, however, far from believing that very large doses are either necessary or hurtless, as I have not unfrequently witnessed very distressing effects not only from an

extravagant quantity, but from the too prolonged use of even moderate portions of it.

That free iodine is an active poison few will deny; but there are many who seem to think iodide of potassium perfectly innoxious, and therefore they apply it not only in any dose, but to almost every malady. Though not justified by uniform success or unqualified safety, these large doses are given so often and so long, as to show that while there is hazard and injury, the danger has been greatly overrated.

The first writer of much repute on iodine was Lugol, who thought that it seldom acted advantageously unless given in minute doses and for a very prolonged period of time. He also thought that only free iodine was of much advantage to the patient, the other preparations only proving useful by such decompositions as extricated it. More recent observations show that iodine acts sometimes with surprising celerity and to the production of astonishing effects, and under circumstances which do not sustain Lugol's theory of its action.

My present purpose is to recite some such cases, not doubting that most of my professional brethren have seen similar ones, because their frequency in my own sphere of observation, and cases already published by others, warrant the supposition.

Mr. M—— N——, S. Fifth street, Philadelphia, was seen by me for the first time on Monday evening in June, 1845. I found him confined to bed by a very painful affection of the head and neck—with occasional and pungent pain of the arms and legs. The superficial arteries of the temples were turgid—the expression anxious and sad—the skin puffy and shining. For several weeks he had not slept more than half an hour at any one time, and seldom more than one hour in the day. For upwards of six months he had not been able to attend to business, and for nearly five years his life had been embittered by neuropathic maladies. He had tried the usual and most of the unusual methods of alleviating pain, and had gone the round of the several empirical systems which promise relief to the sufferer. Despite them all his pains grew worse, and, as he said, nothing gave even temporary alleviation. Even the extraction of almost all his teeth had failed to afford him a respite from pain.

On enquiry I discovered that he had not used any preparation of iodine, although he had encountered arsenic, mercury and most of the narcotics. I therefore ordered him a solution of iodide of potassium, so that he might take seven grains three times a day. Business took me to New York. On my return after eight days, I was agreeably surprised to learn that on the

second night the patient had slept well for two or three hours, still better on the third, and on the fourth day perceived an improvement in his appetite and an increase in his locomotive and intellectual faculties. On the seventh day he was able to visit some of his friends. On this day he was weighed, and perceived that he had lost within two years nearly 75 lbs. From this time he ceased to feel any pain, and gradually recovered his health, strength, appetite and weight. Within six weeks every vestige of his malady and its results were obliterated.

Mr. S——, a respectable merchant, residing in Vine street above Tenth, consulted me in the winter of 1842-3—about the first of January. He had been afflicted with erratic pains for nearly five years, and became at last so sore as to be unable to walk with comfort. He had not been out of his house for three months, and had lost his power of sleeping, as well as of digesting correctly his food. Flatulent dyspepsia disturbed his slumbers, and his arms, bent and painful, would not permit him "to spread the butter on a slice of bread."

I left with him the following prescription:

℞. Iod. potass. ℥ss.
Iodin. grs. x.
Aquæ Oss. M.

Sig. To take a teaspoonful in cold water three times a day.

I believed, and so told him, that he would be relieved within a month, and would probably be able to visit me then at my office.

On the twelfth day after my first visit, Mr. S. came into my office, erect and active, entirely free from pain, without flatulency, stiffness or any other apparent ailment. He was well; and has so continued up to the present time. He perceived a sensible diminution of pain and rigidity in less than forty-eight hours after the administration of the remedy.

Mr. A——, a very respectable cabinet maker, presented an enormous tumefaction, not only of the thyroid gland, but of the lymphatic glands of the neck—so that as his head was somewhat conical near the vertex, and his neck extended nearly to the breadth of his shoulders, he represented a rude model of a sugar loaf, the base resting on the shoulders. A skilful surgeon pronounced the case hopeless, beyond the reach of the knife, and for which he had no other remedy. He, however, at the earnest entreaty of the patient, put in requisition the usual depletion and exutories, with mercury and cicuta. The case grew worse—severe dyspnœa supervened, deglutition became difficult, and

death seemed at hand. We proposed then to try iodine, a remedy of which at that time neither of us had much direct knowledge. Within a single day, the patient breathed better and became thoroughly convinced of approaching recovery; and, at the end of a week, experienced very little inconvenience from, though still deformed by his malady. In a few months the thyroid no longer hung over his sternum—not an abnormal gland could be felt in his neck—and he recovered both his health and personal appearance entirely.

The mastery over pain exercised under certain conditions by this singular remedy, was curiously manifested in the case of Mr. McC., a reputable farmer in this vicinity, who consulted Dr. Mütter and myself for a tumour of large size and schirrous character, seated in the neck and protruding into the *isthmus faucium.* Although the tumour impeded deglutition and respiration, and much disfigured the patient, he seemed to suffer chiefly from a prolonged ceaseless pain of an aching and depressing character. Not hoping for more than a temporary benefit, we endeavoured by diet, opiates and local depletion, to lessen the size of the tumour and the sufferings of the patient—but in vain. Iodide of potassium in eight grain doses was then ordered. After the second dose the pain ceased for some days, although the tumour continued to enlarge. The pain returned at irregular periods, but was always, as speedily as at first, relieved by iod. of pot., and the patient died of dyspnœa, perfectly conscious to the last, *and free from pain.*

My case-book contains several similar examples, but as they do not offer any peculiarities, it is scarcely necessary to recite them.

In my next communication I will endeavour to show some of the evils which result from the indiscriminate use and excessive administration of iodine. Before closing this hastily written paper, I may remark that tumours yield usually most readily to the direct or endermic application of iodine as a tincture or unguent, and that bronchocele is peculiarly under its influence when thus applied.

Case of Transposition of the Thoracic and Abdominal Viscera, with Organic Disease of the Heart. By Edward R. Squibb, M. D.

For the short history of the following case, and the opportunity of witnessing a post mortem examination of it, the writer is indebted to the kindness of Dr. John S. Rohrer, of Chesnut street, in whose practice it occurred.

The necroscopy was made by this gentleman on the 9th of

April, 1846, twenty one hours after death, in the presence of Professor J. Pancoast, Dr. Squibb, and Dr. Fetters, of Richmond.

The patient, Mr. J. F., æt. 48, was a spare man of medium stature: up to a period, say 3 years, before his death, he had enjoyed tolerable health. After this period he frequently complained of an uneasiness and dull pain in the thorax, which was brought on or augmented by errors in diet, or excitement. A slight bluish tint of the lips and ends of the fingers gave him generally the appearance of coldness or chilliness, and during the latter part of his life, he kept his room heated inordinately. His pulse was hobbling, or intermittent for a year or more, previous to the last few months of his life, when it became much more regular. A marked blowing sound, and a sharp flap were heard over the heart, the locality of which gave rise to difficulty in the diagnosis. He was much troubled by flatulence and irritability of stomach, and by a kind of asthmatic dyspnœa, being obliged to rest in an upright position. This latter was not from any pain or feeling of suffocation which he experienced on lying down, but merely from restlessness and discomfort. A short dry cough also troubled him toward the last, and augmented the laboured feeling about the heart.

About four weeks before death, he was attacked by pericarditis, which yielded without difficulty to the usual treatment.

He was not confined to his bed, or even to his room, immediately preceding his death, but attended to his usual business. A few moments before his death, he was sitting by a very warm stove in a close room, the weather being very mild and pleasant without. He fell suddenly from his chair and was lifted on to a sofa, where he gave a gasp or two and died.

His face and neck were extremely blue, and the veins turgid and prominent, and the pupils dilated to nearly the whole extent.

Necroscopy. On removing the sternum, and opening the pericardium, the heart was found to be unusually large, and with its sack exhibiting some marks of recent inflammation. It occupied a position, with relation to the sides of the chest, exactly the reverse of what is usual, the apex being near to the junction of the sixth rib of the right side, with its cartilage, whilst its base was to the left of the median line. The aorta arched towards the right, whilst the arteria innominata and cavæ occupied a position on the left side.

The pulmonic side of the organ was in front and towards the left, the systemic behind and to the right.

The pulmonic side only varied from the natural, in its position and dilatation, except that the eustachian valve was unusually developed, and supported by columnæ carneæ from its free edge. The pulmonary artery was also much dilated, and with the cor-

responding ventricle and auricle was filled with dark coagulated blood.

The foramen ovale, between the auricles, was patulous to such an extent as to admit the handle of a large scalpel to pass through it with ease. The opening, however, as is usual in such cases, was so oblique as to render the free margins valvular by overlapping.

The systemic auricle was unusually capacious, and its walls much thicker than usual. The corresponding ventricle was also much dilated. The mitral valves were studded throughout by osseous tubercles, and entirely insufficient; and the semilunar valves at the mouth of the aorta in a very similar condition.

The aorta passed down on the right side of the vertebral column, and the ascending cava up on the left. The œsophagus inclining outward, passed through the diaphragm to the right of the median line. The right bronchus was the longer and smaller, and formed a more obtuse angle with the trachea than did the left shorter one. The lung of the left side was divided into three lobes, whilst that of the right had only two.

Ancient adhesions between the pleuræ were numerous, particularly at the posterior portions; and both lungs were somewhat congested. There were also adhesions between the surfaces of the pericardium, particularly over the right ventricle. The larger lobes of the liver with the gall bladder, was found on the left side, as was also the cæcum with its appendix and ascending colon. The spleen much enlarged, was situated to the right; also the pancreas, descending colon and sigmoid flexure. The great end of the stomach lay to the right, and the lesser or pyloric extremity, with the commencement of the small intestine, to the left. The right kidney was of a somewhat clubbed shape, and flattened at the upper larger extremity; it was situated rather higher in the abdominal cavity, than the left one. The left spermatic vein emptied into the ascending cava, sending a branch toward the pelvis of the kidney. The correspoding vein of the right side emptied into the emulgent vein near the pelvis of the right kidney. The origin of the spermatic arteries appeared to correspond with the anomalous termination of the veins, and other minor points, not noted, were probably transposed to an equal extent.

On the Ectrotic Treatment of Small-Pox by Tincture of Iodine. Being an extract of a letter from Dr. Samuel Jackson, *of Philadelphia, (late of Northumberland,) to* Professor Dunglison.

In April, 1845, I was led to make an experiment of aborting small-pox by the tincture of iodine, from contemplating its won-

derful influence over erysipelas. I applied it to one arm of a child eleven months old, in confluent small-pox, on the third day of the eruption, and to the arm which appeared the worst, rubbing it freely on with a sponge, three times that day and twice the next. On the 11th day, when the pocks over the whole body were at their height, elevated with hard bases, those of the medicated arm were entirely flat, with thin, purulent matter under the dead cuticle, without any swelling of the part. In this state was the disease when I showed the case to Drs. Bond and Nancrede, who agreed with me that there was a complete abortion. There are, however, some very slight pits now to be seen, but they are very inconsiderable when compared with those on the other arm.

I have not had an opportunity of repeating the experiment, for during the late epidemic I saw nothing but varioloid, and that so slight that no trial could be made. I mentioned the child's case to a number of physicians, but I do not know that any of them tried the medicine, except Drs. Goddard and Sargent, whose written reports I send you.

Dr. Sargent used the iodine on one side of the face in 25 cases —"the swelling, soreness, and tenderness were very much less than on the side not covered; each pock remained flattened; but I cannot say that it prevented pitting."

Dr. Goddard writes that he tried the medicine in five cases— "not one of the patients shows the least pit or mark; none of them had been vaccinated, and the disease was confluent in most of them."

Dr. Sargent's experiments are not as favourable as Dr. Goddard's and my own—possibly from using a feebler medicine. That which I used was taken from my own closet, made by myself.

One advantage of this treatment is, that it removes the cuticle and leaves the part free from those disgusting discolorations which commonly remain for months.

It might be well to consider how far it would be prudent to extend the application over the body, in order to mitigate the disease, in malignant or even in severe cases. No fair trial can be had without applying it on the first day of the eruption and continuing it for several days, say 5 or 6.

I have found the same medicine an admirable remedy in the irritable ulcer with inflamed surface, and erysipelatoid margins. It soon kills the cuticle, and with this the whole inflammation disappears, when a little lunar caustic to the ulcer disposes it to granulate.

BIBLIOGRAPHICAL NOTICES.

A Practical Treatise on the Diseases of Children. By James Milman Coley, M. D., Member of the Royal College of Physicians, &c. Author of a Treatise on the Remittent Fever of Infants, &c., and of Essays on Phlegmonous Erysipelas, on Scherroide, Keloid et Cancroid, &c. 8vo. pp. 467. London, 1846.

As long almost as we can recollect anything of professional moment, we have been familiar with the "Practical Treatise on the remittent fever of infants, with remarks on hydrocephalus, &c., by James M. Coley," which was published "in the provinces," at Stamport, in 1813,—thirty-three years, that is, ago. Dr. Coley is, therefore, a veteran in the practice, if not in the science of his profession. We are told, indeed, in the Introduction, that the practical portions have been the result of an experience of forty years, during which time the author "has been constantly engaged in recording cases, accumulating facts, and pursuing pathological inquiries."

His "first love"—the essay on the remittent fever of infants—probably suggested to him the present "treatise," stimulated perhaps by the fact of his having become a metropolitan practitioner, and the consequent necessity—for it is so esteemed by many—of heralding the advent of a new comer by some publication that may serve as an advertisement to the citizens of London.

Even in the introduction to the work, we meet with assertions which make us doubt whether the author possesses any marked fitness for elucidating the comprehensive subject which he has selected as his "prolegomenon"—if the work be really intended to usher him into metropolitan notice. The diseases of children—he admits, as he necessarily must do—have attracted the attention of physicians in all countries, "many of whom have published useful essays on the subjects." Amongst these he enumerates but one American—"*Dewes.*" Of the writings of Eberle, or the still later of Drs. Stewart and Condie,—the

last of whom has published an excellent and plenary work on the subject—and we mean, by this remark, no disparagement of the others—seem to be totally unknown to him. We are not surprised, therefore, at the admission,—"I am not aware that any author—British or Foreign—has published a work comprehending all diseases incident to children, and their appropriate surgical as well as medical treatment. This omission may be accounted for by the division of the profession, which has limited the education and practice of physicians, who have hitherto been the principal and only writers on infantile disorders." p. xiii. This division does not, however, apply to the profession in the United States.

"The attention of pathologists," he remarks in his preface, "has of late been much engaged by the important subject of Tuberculization; some contending that it is the result of inflammation, and others of an opposite condition. The disposition to this morbid process, as I have stated, may be hereditary or acquired; but I have endeavoured to show, that its development is dependant on vascular excitement, produced by external injury or atmospherical vicissitude, and that the process by which the morbid product is deposited is of an inflammatory nature. The prophylactic cure and antiphlogistic treatment, which this theory suggests, will often be found to possess the advantage of modifying or averting the specific production, especially in that form of the disease, which we denominate scrophula." p. xvi.

Yet nothing has been more firmly established, in our opinion, than that the morbid action in scrophulosis and tuberculosis differs very materially from the inflammatory process. The facts which hæmatology have brought forth; the different phenomena presented by those affections, and the most successful hygienic and therapeutical agencies in each have sufficiently shown, that both tuberculosis and scrophulosis consist in perverted nutrition, but certainly not in that particular form, which characterizes inflammation. Somewhat analogous, however, they must be in their local manifestations, if our view be correct, that inflammation is a disease of the system of nutrition of the part affected. Our experience has satisfied us, that in place of an antiphlogistic treatment being appropriate for those who are predisposed to tuberculosis or scrophulosis, an opposite course should be adopted; the patient should be placed on a regimen,

which will develope rather than diminish his powers; and even if experience had not shown this to be the correct view, we should have been induced to embrace it from the facts elicited by the observation of recent hæmatologists.

On one more observation in the preface we may briefly animadvert. "The few philological remarks," says the author, "which occur in the course of the work, have been introduced for the purpose of correcting an erroneous etymology, which has in some instances been copied by successive compilers, and led to improper views and practice." p. xvi. Yet we think Dr. Coley has not been eminently successful in this department; nor has he bestowed much befitting knowledge or attention in this volume on what may be regarded as one branch of philolology,—the correct mode of writing classical terms and prescriptions. Thus we have "*Hydrocephalus externus* or *Cephalæmatoma*,"—no one—we had presumed—regarding these terms as synonymes. *Potassæ Iodidi* for *Potassii Iodidi; Tinia Tarsi* for *Tinea Tarsi*—an obsolete term, by the way; *Acidi Hydrochloridi* for *Acidi Hydrochlorici; Adepis* passim for *Adipis;* Εκζημα for Εκζεμα; *Nœvus* for *Nævus;* "*Muguet* or *Mucosity*;" *Phagadena* for *Phagedæna; Dyptherite* for *Diphtherite;* "*Acute muco-enteritis* or *Diarrhœa;*" *Phthysis* for *Phthisis; Albuminaria* for *Albuminuria; Phymosis* for *Phimosis;* &c. &c. These errors—some of which are doubtless typographical—would not have been signalized by us, had not the author taken credit for his accuracy. The proper names are sadly mutilated,—some past all recognition. Dr. Bacton means, we presume, Dr. Barton; and Dr. Hildreth of *Tancaville* is, doubtless, Dr. Hildreth of Zanesville, the gentleman whose name has already undergone such unaccountable metamorphoses; and who appears to be best known in the European Journals as Dr. *Tanesville!*

We do not think the work of Dr. Coley an important addition to our medical libraries on this side of the Atlantic. We are, indeed, liberally supplied with publications on the subject by our own authors; and we think the literature of Great Britain would have been more enriched by the republication of one of these—that of Dr. Condie—than by the one before us. Dr. Coley has evidently consulted—and with due acknowledgments—the

productions of some of the modern French writers, and especially the excellent treatise of MM. Rilliet and Barthez; but he has not been—as the best writers on this side of the Atlantic are—cosmopolitan in his researches; and consequently his work is less complete than it might have been. In his direction for treatment he errs greatly in not laying down his indications; hence, we must suppose that particular drugs are adapted for the removal of particular pathological conditions. Take for example chorea.

"*Treatment.* The variety arising from constipation should be attacked by the exhibition of castor oil or chloride of mercury and jalap, which should be repeated every second or third morning"—as if not cathartics in general but these special cathartics were indicated. Again. "The neuralgic and periodical symptoms will be removed by five minims of liquor potassæ arsenitis, given in some convenient vehicle, three times a day." "The anæmii [anæmic] and chlorotic varieties will be most successfully combated by two grains of sulphate, or twenty of oxyde, of iron, repeated three times every day." His pathology may be imagined but not *comprehended* by the statement, that these medicines operate curatively "by restoring the hæmatosine and fibrine [?] of the blood, and invigorating the abdominal ganglionic nerves."!

The well informed pathologist and therapeutist will certainly not be disposed to take Dr. Coley as a *facilè princeps.* His mode, indeed, of viewing disease in most of its aspects is scarcely *à portée* with the existing condition of medical science; and with this observation we take leave of him. To our publishing undertakers—*entrepreneurs*—who are so anxious to reproduce everything that appears abroad, we would say, for their own sakes, "*requiescat in pace*"!

SYDENHAM SOCIETY. ***An Anatomical Description of the Diseases of the Organs of Circulation and Respiration.*** BY CHARLES EWALD HASSE, M. D., Professor of Pathology and Clinical Medicine at the University of Zurich, &c. &c. *Translated and edited by* W. G. SWAINE, M. D., Physician Extraordinary to H. R. H. the Duchess of Kent. 8vo. pp. 400. London, 1846.

On all subjects that demand elaborate investigation, the Germans hold certainly an elevated position in the scale of nations. Their commentaries on the classics of Greece and Rome; their admirable philological enquiries into the languages of those ancient countries, and, indeed, of all countries—ancient and modern—in every quarter of the globe; their labours in astronomical science; in mathematics, simple and applied,—their intimate investigations in chemistry in all its branches, but especially in organic chemistry and physiology, have acquired them a world-renown; and when we observe—emanating from one of them—a treatise like that before us, on a subject requiring pains-taking and accurate observation, we hail its appearance, confident, that a large amount of valuable matter must be brought together: nor—in the present instance—are we likely to be mistaken.

Dr. Hasse has long devoted himself to the study of pathological anatomy, and is possessed of a mind capable of profiting by such application.

"My former fellow student," says the Editor, "and I have both pride and pleasure in adding, my intimate friend, Professor E. Hasse, conceived a very early predilection for pathological anatomy, and this bias was fostered and matured by a lengthened sojourn at the schools and hospitals of Paris and Vienna. On his return to his own university, Leipsic, he was appointed by my revered clinical instructor, Professor Clarus, to be assistant clinical teacher, and also pathological prosector at the principal hospital. With such means at his disposal, my friend forthwith commenced forming a pathological connection, which, under his auspices, has grown into a most interesting and valuable museum; and the present work is but a collateral result of the unwearied *practical industry* which he displayed in that undertaking, combined with a thorough knowledge of all that other observers had before achieved in the same field of science.

Hence it will at once be seen that this treatise differs essentially from what is commonly called a compilation. The high estimation in which it is held in Germany is clearly shown by the fact, that since its publication, Professor Hasse has had the offer of the chair of clinical medicine from no fewer than five universities. He has accepted that vacated by Professor Schönlein at Zurich, and at present holds the additional rank of Rector of that Germano-Swiss University." p. vi.

It was on account of the high reputation of Professor Hasse, and the acknowledged excellence of the volume before us, that the council of the Sydenham Society of London determined to have the original translated, and issued under their auspices,—as one of the valuable works with which they are favouring the profession. The work has been revised by the author, who has re-written some of the most important chapters, and added much information concerning the microscopic characters of a great variety of diseases.

The volume—as the title states—contains only the pathological anatomy of the organs of circulation and respiration:—

"The original is intended by the author as the first of a series of tomes, comprising the diseases of every system and organ of the body. But the uncertainty that necessarily attaches to the appearance of comprehensive works in distinct parts, has induced the council to prefer publishing the present volume, which constitutes singly a complete and valuable treatise, as a separate and independent work." p. vii.

Part First—"*Diseases of the Organs of Circulation*"—consists of five chapters, embracing respectively—Diseases of the lymphatic vessels and glands; Diseases of the veins; Diseases of the arteries: Heterologous formations and diseases of the heart. Part Second—Diseases of the organs of respiration—has fifteen chapters—treating, respectively, of disease of the pleural membrane; inflammatory disease of the substance of the lung; diseases of the lung not necessarily dependent upon, or allied to, inflammation—as gangrene, œdema, &c.; disease of the air-passages; inflammatory disease of the air-passages; exudative inflammation of the air-passages; catarrhal pneumonia; organic sequelæ of catarrh; emphysema of the lung; tubercular disease; cancerous tumours in the respiratory organs; formation of cysts in the respiratory organs; pseudomelanosis of the lungs and

bronchial glands; diseases of the thymus gland; and diseases of the thyroid—a division, by the way, not eminently marked by *lucidus ordo.*

Our space and objects will not permit more than a notice of this volume, which must be esteemed a valuable addition to the library of the pathologist; but it would have been still more valuable had its author attended more to the labours of observers who write in the English branch of the great Teutonic stem of languages. We would instance the chapter on diseases of the thymus gland as wanting in much exact information, which might have been readily culled from Sir A. Cooper, Mr. Simon, and from observers on this side of the Atlantic.

The work is beautifully got up;—in the same elegant manner, indeed, as its predecessors from the press of the SYDENHAM SOCIETY OF LONDON;—of which it may be said, "*florescet quoti die magis.*"

Scrofula; Its Nature, its Causes, its Prevalence, and the Principles of Treatment. By BENJAMIN PHILLIPS, F. R. S., Assistant Surgeon to the Westminster Hospital. 8vo. pp. 350. Lea & Blanchard, Philadelphia, 1846.

The work before us was published in London within the present year, and is now reprinted for the use of the profession in this country, by our enterprising townsmen, to whom we are indebted for a large proportion of the standard works on Medicine and its collateral branches which have appeared in the English language within the last few years.

In the investigation of his subject, the author has manifestly spent much time, read extensively, and brought together many facts and opinions derived from a great variety of sources, and has thus given us a learned, although certainly not a very original work.

After speaking of the opinions entertained of the disease by those who have preceded him, the author proceeds, in chapter second, to state his "own ideas of the nature of Scrofula." "I conceive, then," he remarks, "that Scrofula is a disease of the Constitution, and that it is most clearly manifested by certain external signs, of which swelling of the subcutaneous lymphatic gan-

glia is the most conclusive. But *tumid glands*, however, wherever they may be situated, are not always a proof that a constitution is scrofulous; they may be the result of local irritation, in an apparently sound constitution. The glands in the groin may swell, from a sore on the feet; a mesenteric gland may swell under the influence of an ulcer in the intestine; a cervical gland may enlarge under the irritation of teething, or of scalp disease. A *tumid gland,* even *in the neck,* is then no proof that the constitution of the individual in whom it is found is scrofulous. But supposing one, or several cervical glands to become tumid, in the apparent absence of any obvious local irritation, this would constitute a strong ground for suspicion, that the constitution was suffering under the taint of Scrofula. It would not, however, amount to more than suspicion, and the suspicion could scarcely receive absolute confirmation, unless we have the opportunity of observing the contents of the tumor itself. Unless the swelling of the gland be accompanied by the deposite of a product, hereafter to be described, known as *scrofulous matter*, the proof of a scrofulous constitution is in my judgment, wanting."

Mr. Phillips seems to place little confidence in what are called temperaments, in predisposing to the disease. "The result of my own observation of persons whose constitutions are tainted with Scrofula, has satisfied me that there is the utmost possible variety in the external characters of those who present undoubted scrofulous taint. When the taint is made evident by scrofulous deposits, we find in one case the hair and complexion are dark, in another light; in one the cheeks are rosy, in another pale; in one, the alæ nasi are expanded and the upper lip is tumid; in another, both of those features present opposite characters. So that it becomes a matter of great difficulty to determine whether the presence or absence of those signs, is most characteristic of a scrofulous taint."

He believes "that diseases regarded as scrofulous, but in which no scrofulous matter is present, are not scrofulous at all, but simply the result of such low inflammatory action as is often set up in a debilitated state of the constitution," and that he knows of "no certain sign by which the state of the constitution

which precedes the deposit of scrofulous matter can be recognized."

"In a constitution favourable for the deposite of scrofulous matter, I believe there are no features, in the absence of the tumor, so constant and so conclusive as to justify a reliance upon them, in pronouncing an opinion whether a constitution be scrofulous or not."

After denying so emphatically that the presence of any or all of the symptoms usually enumerated as characteristic of Scrofula, and insisting that nothing but the presence of the "scrofulous deposite" can be regarded as conclusive evidence of the existence of the disease, it surely was incumbent on an author, writing expressly on the subject, to have endeavoured to determine the nature, composition and appearance of the deposite, so that no difficulty could arise in discriminating between it and other products of disease, and yet, Mr. Phillips has signally failed to do so, and, indeed, seems to have taken but little pains on the subject. Contenting himself with the observations of others, without even verifying them himself, we have the descriptions of Albers, Ruette, Bredow, Dalrymple, and Gulliver, which are as unlike as the names of the authors. It is not only in regard to the physical properties, as observed by the aid of the microscope, that the subject is thus lightly passed over, but the "Chemical characters" of the deposite are disposed of in the same summary way. A single page contains all that is said on this point, and that consists wholly of the heterogenous observations of other inquirers; for example: "Prout regards this matter as albumen, incompletely developed. Gendrin as a mass of albumen, with excess of salts. L'Héritier found it to contain albumen, very soft fibrin, some fatty matter, and carbonate and phosphate of lime. Bredow regards the matter as albuminate of potash, or soda."

Can any thing be more unsatisfactory? And this in a book written professedly on the subject, in which the deposite is regarded as so specific as to characterise the disease, independently of all other symptoms!

The author admits that the state of the organ in which the deposite is about to take place undergoes some change or preparation. "Commonly, if not always, glandular structures do

undergo considerable change before scrofulous matter is deposited in them. They acquire a considerable increase in volume, in density, and in vascularity." But whether this state of a gland is determined by the circulation within it of blood which has undergone a change, or is independent of the blood—whether the blood fits the organ to receive the deposite, or the organ fits itself, is a question which he regards as of very difficult solution. The greater frequency with which particular glands are affected, he seems to regard as evidence that it cannot arise from the action of the blood, but must proceed from some other developing cause, such as irritation of the part, from the action of cold, bad chyle supplied by improper food, etc.

These doubts, it appears to us, are quite inconsistent with the doctrine advocated in other parts of the work, that the disease is constitutional, and dependent on a vitiated condition of the blood. Of this vitiated or changed condition of the blood, which he thinks precedes the deposite and gives occasion to it, he attempts no explanation, nor as to its chemical or structural change does he afford us the least new light. The sum of his conclusions on this point may be seen in the following closing remarks of the fifth chapter: "So much may, I think, be fairly assumed, that the blood is changed before the deposite is made, that the accumulation of certain morbid materials in the blood constitutes what is known as the scrofulous diathesis or constitution, and that their deposition in the subcutaneous lymphatic glands constitutes what we know as Scrofula."

The sixth chapter is occupied with a discussion of the question whether *pulmonary turbercle, or phthisis, and Scrofula*, in their nature are identical, and he takes the negative side, and this in disregard of the acknowledged fact that the deposite in both cases, whether seen by the naked eye, through a microscope, or tested by chemical analysis, presents no difference in its character and composition—whether taken from the mesenteric, cervical or inguinal glands, or the lungs, no difference can be discovered. The grounds on which he mainly relies in support of his proposition are "that in districts where the causes of phthisis act with most intensity, those of scrofula fall lightest; that the age when the ravages of scrofula are most keenly felt, is precisely that when the visitation of phthisis is least to be apprehended;

that the sex which suffers most severely from one of these diseases is least affected by the other. And beyond all this, there is the fact that among the numerous victims of phthisis, at least eighteen out of every twenty exhibit no marks of having suffered from Scrofula."

Without meaning to affirm either side of the question, we may just remark that not one of the allegations of the author can be admitted to be at all conclusive. That Scrofula occurs least frequently in districts where phthisis most prevails, is a fact to be doubted; and if admitted, only proves that local causes operate to determine the developement of disease in one organ more than another, as in hot climates inflammation is caused in the abdominal viscera, in colder latitudes, in the thoracic, etc.

That a difference exists in the predisposition of different organs to be affected according to age and sex, is a fact of too general application to be adduced as evidence of a difference of character because of a difference in seat; and whether the disease occur in the lungs or the lymphatic glands, there, of course, on post mortem examination, we may expect to find the lesions of structure consequent upon it.

In reference to the *causes of Scrofula*, the author has collected, partly from his own researches, much valuable statistical information, which he has accompanied by some very judicious remarks. He admits that hereditary predisposition often exists, but seems to attach less importance to it than John Hunter, Lugol and others. Intermarriage, so much dwelt on by some, he discards altogether as a cause.—"My impression is, that intermarriages among healthy persons tend to no such calamity as the production of Scrofula; but I must not be understood to assert that other physical or mental influences may not result from such unions." Unfavourable hygienic influences, and especially a deficiency of nutritious food, are properly regarded as the most potent and common of the causes of Scrofula.

Mr. Phillips, besides the opportunities presented to him as a distinguished practising Surgeon in the great British metropolis, is attached to a large hospital in which the occasions for the exercise of his skill in the treatment of scrofulous diseases must have been numerous; his experience, therefore, with the

use of the various curative agents commonly employed, is valuable,—although far less so than if recommended by a consideration of the pathology of the cases or the ascertained therapeutical action of the remedies themselves.

The articles and means most prominent in his estimation, and to which he has chiefly confined his remarks, are the following :

Mercury.—"I will not occupy time by considering the theories which have been invented to explain the action of Mercury, as the best of the remedies employed for the cure of Scrofula; but I will simply deny that it is an agent upon which we can rely for the cure of Scrofula. In the sense of a remedial agent, capable alone, and under ordinary circumstances, of removing Scrofula from the constitution, Mercury is not, I believe, entitled to any confidence; but in the sense of an agent to be variously associated with other medicines, according to the symptoms of the disease, there is no doubt but that it will be found useful in many cases of Scrofula. In some instances, in virtue of a purgative, in others of a general alterative influence. But I am satisfied that when so administered as to lower the general powers, whether by profuse purgation, or by salivation, its influence is usually, if not always, injurious."

Iodine.—"In my own practice I have exhibited every form of Iodine extensively in cases of Scrofula, and supposing the patient to remain exposed to the influence of the same conditions in which the disease was at first manifested, and the period of the year to be that which has not been found favourable for the cure of the disease under other modes of treatment, I cannot say that I have had reason to estimate the curative powers of Iodine so highly as many others have done. I know that among the out-patients of hospitals, whose circumstances remain unchanged, and who apply at the latter end of autumn, or the beginning of winter, we may often exhibit Iodine in every form for weeks or months, without producing any sensible amelioration in the patient's condition. I know also that at the beginning of summer, a patient similiarly affected and similarly treated, will, often in a few weeks, exhibit a marked improvement—but how much of this should be referred to Iodine? How much to season?

"I by no means wish to express the opinion that Iodine has no curative influence in Scrofula; and although I believe that it is not, ordinarily, strong enough to make head against the disease in an unfavourable season of the year, yet I think I have known some cases in which decided benefit has seemed to result from its use, even when the season and other circumstances have not been favourable, and when no change in those circumstances has

occurred, beyond the exhibition of Iodine; and yet, even then, I refer the good to a general alterative action upon the economy, and not to any specific action; the general health has improved under the employment of the medicine, and the local disease has abated. Such cases have, however, formed a small minority of those in which Iodine has been administered by me, and I have endeavoured, though not satisfactorily, to account for these exceptional cases, by some change, some effort made by the system itself."

Barium.—"I do not mean to say that my experience of its power over Scrufola is such as to bear out the opinions of its efficacy so confidently expressed by Dr. Adair Crawford. But sure I am, that its power as a discutient, over scofulous glandular tumors, and over the scrofulous constitution, are little, if at all, inferior to those of Iodine. Its field of usefulness is, however, more limited than that of Iodine; because we have the advantage of a choice of many different combinations of that medicine. Barium yields only one preparation which has been much employed as a medicine; the meconnate and nitrate are very rarely used. Barium, however, seems to be a more certain stimulant than Iodine, or rather, we might say, irritant; and, in my judgment, its use is clearly contra-indicated where there is much free inflammatory excitability of the system; but in those cases where the tallow-like complexion, the pale tongue, and the languid circulation, accompanied by irritability of the mucous surfaces, are present, the virtues of the Barium are often very remarkably demonstrated. I usually give it in solution, a grain to an ounce of distilled water, with ten drops of Compound Tincture of Gentian. Of this solution, I commence with half an ounce twice a day, and on no occasion have I exceeded three grains in the day, and up to this moment I have not experienced any check in the administration of the medicine."

Hydrochlorate of Lime.—"Hufeland conceded to the Muriate of Lime similar properties, in relation to Scrofula, with those possessed by the Chloride of Barium, 'Except that it was more irritating, and therefore required to be used with more precaution.' I am not satisfied that it has any very evident action upon scrofulous glands. I cannot say that I have ever seen a case in which, in the absence of other influences, the discutient power of this medicine has been clearly manifested. But I am convinced that when given in moderate doses, it is more generally tolerated than the Chloride of Barium, and I therefore conclude that the inconveniences to which Hufeland was exposed, resulted from the mode in which he administered this medicine."

Alkalies.—To this class he attaches no great confidence.

"No one has made a larger trial of the Alkali than Brandish,

and I think his statements with reference to it bear upon their face the marks of truth; and what is the result? That Caustic Potash, in large doses, continued for many months of several years and associated with good food, good air, and proper exercise, has seemed to cure many bad cases of Scrofula. Would they not have got well, and probably assoon without the Alkali? I believe in many instances they would.

"I have tried the medicine extensively, but not in such large doses as Brandish used, and I found the bitter ale a very convenient vehicle for its administration, and my experience is very similar to his. My conclusions drawn from that experience are, however, unlike those of Brandish. I have known many cases in which under this treatment the glandular tumors seemed to subside rather sooner than they would probably have done without it; but I have known many more in which it did not exercise any sensible effect."

Burnt Sponge.—"It is not necessary to inquire to which of the two substances, (Iodine and Animal Charcoal) its pretended virtues are owing, because we have never discovered that it really had any virtues; and in all the cases, and there are many, in which I had an opportunity of observing the effects of the medicine, I have never seen anything to satisfy me that it possesses any power over scrofulous swellings, or the scrofulous constitution."

Cod-Liver Oil.—"In the course of the last six years, I have employed it pretty extensively myself, and my estimate of its virtues, as a remedial agent in scrofula, is much less favourable than that of many others who have given it a trial. There is, however, scarcely any form of scrofula which I have not seen to improve under it: enlarged glands, sinuses, ulcers, lupus-like scrofula of the face, Caries, all these I have known to get better under its employment; but generally, one of two things happened, either the stomach or the patience failed before the remedy had been carried far enough to produce any considerable amelioration. Indeed, either my own patience or that of my patients, has usually given way long before they have consumed 100 lbs. or even 36 lbs. of the remedy; or have continued to take it for six months, or as many years, as some patients have done."

Sea Water.—"I have had opportunities of observing the internal employment of Sea-water, but not on a large scale, nor unassociated with residence on the coast. I have known it to be taken to the extent of a pint before breakfast, and to be attended with discomfort to the patient, from the profuseness of its purgative action; and when its daily use has been persisted in, the depressing effects which have resulted, have been injurious. But used daily, to the extent of a small tumbler, with an equal quantity of milk, and taken at bed-time, the patient submitted to this treatment has improved in health, in so far as the condition of the in-

testinal secretions can be taken to be a proof of the fact; but I am by no means satisfied that the time and the place have not had quite as decided an influence upon the patient's condition as the Sea-water introduced into the stomach.

"In order to drink Sea-water, persons have usually been taken to the sea-coast, and this at a favourable season of the year, and to those two circumstances, any good which has resulted from the practice may be attributed, I think, with more fairness, than to the daily ingestion of half a pint, or a pint of salt water."

Mineral Waters.—Our author does not deny that great benefit has accrued to Scrofulous persons from the employment of various mineral waters, but he justly infers that much of the credit of such cases was properly due to the change of season, change of air, diet, and other hygienic influences which were concurrently enjoyed.

"That they have been more indebted for the credit they possess to the enthusiasm of friends than to the faithful register of the cures, which it is alleged have resulted from their employment, is I think true. And no doubt M. Patissier was near the truth when he said, 'Les eaux minerales naturalles guerissent quelquefois, soulagent et consolent toujours."

THE MEDICAL EXAMINER.

PHILADELPHIA, AUGUST, 1846.

NATIONAL MEDICAL CONVENTION.

In a notice of the National Medical Convention which met in New York in May last, our respected contemporary, *the Southern Journal of Medicine and Pharmacy*, has published the following as one of the resolutions *adopted* by that body, viz.:

"*Resolved*, That the union of the business of *Teaching* and *Licensing* in the same hands, is wrong in principle, and liable to great abuse in practice. Instead of conferring the right to license on Medical Colleges, and State and County Medical Societies, it should be restricted to one Board in each State, composed in fair proportion of representatives from its Medical Colleges and the profession at large, and the pay for whose services as Examiners should in no degree depend on the number licensed by them."

This is an error. According to the official report of the proceed-

ings, which has been published in most of the medical journals, this *resolution* was proposed by Dr. Bartles, and after some discussion and several motions to amend, lay on the table, &c., was finally, on the motion of Dr. Manley, referred to a special committee. This committee, as appointed by the President of the Convention, consists of the following gentlemen, viz.: "Drs. McNaughton, Albany, N. Y.; J. R. Manley, N. Y.; J. W. Francis, N. Y.; Isaac Parrish, Philadelphia; R. Blakeman, Fairfield, Conn.; J. Cullen, Richmond, Va.; and Thomas Cock, N. Y." The Committee, it is understood, will report to the Convention to be held in Philadelphia in May, 1847.

HEALTH OF PHILADELPHIA.

There is scarcely a spot on the globe, probably, where the inhabitants more uniformly enjoy the blessing of good health, and where consequently the Bills of Mortality are lower, than in the City of Philadelphia; on this account we have not been in the practice of noticing the subject, except on one or two occasions during the late epidemic of small pox. The unusual number of interments reported by the Board of Health which occurred during the week extending from the 11th to the 18th inst., having occasioned considerable remark, we are induced to publish the *report*, that our readers may see the ages of the deceased, and the diseases of which they died. From this it will be seen that there were 251 interments, of which 157 were children under ten years of age. It will also be seen that of these 46 died of cholera infantum; 18 of convulsions; 7 of marasmus; and 14 were still-born. So that an inspection of the report will show that there is no particular epidemic prevailing, except that of the summer complaint of children. The number of *fever* cases is unusually small, and with the exception we have mentioned, the inhabitants of the city, we believe, never enjoyed better health than at the present time.

Moreover, it must be recollected that this is the season of greatest mortality in our American cities generally. It occurs chiefly among children, and in large proportion among those of the poorer classes. The abundance of unripe fruit and green vegetable food brought to market, and the elevated temperature during the summer months, may be regarded as the great predisposing and exciting causes.

During the corresponding week, the interments in the City of New York were 425; and in St. Louis and other western as well as eastern cities, the mortality has been quite in the proportion of that of Philadelphia and New York. Two or three weeks, however will bring cooler nights, and consequently relief to the little sufferers.

HEALTH OFFICE.

PHILADELPHIA, July 18, 1846.

Interments in the City and Liberties of Philadelphia, from the 11th to the 18th July.

DISEASES.	Adults.	Children.	DISEASES.	Adults.	Children.
Apoplexy,	6	0	Brought over,	63	115
Burns,	0	1	Inflammation of the Lungs	2	3
Cancer,	1	0	—— of the Stomach & Bowels,	2	5
—— of the Stomach,	1	0	—— of the Bladder,	1	0
Casualties,	1	1	—— of the Liver,	1	0
Croup,	0	1	—— of Peritonæum,	0	1
Congestion of the Lungs,	2	0	Intussusception,	0	1
—— of the Brain,	4	0	Inanition,	0	2
Cholera Infantum,	0	46	Mania a Potu,	2	0
—— Morbus,	2	2	Malformation of the Liver,	0	1
Consumption of the Lungs,	10	2	Marasmus,	0	7
Convulsions,	1	18	Neuralgia,	1	0
—— Puerperal,	1	0	Old Age,	3	0
Cyanosis,	0	1	Palsy.	5	0
Diarrhœa,	3	4	Scirrhus,	1	0
Dropsy,	2	0	Scrofula,	1	1
—— Heart,	0	1	Sore Mouth,	0	3
—— of the Head,	0	5	Small Pox,	0	1
—— in the Breast,	1	1	Still Born,	0	14
Disease of the Brain,	1	1	Strangulation,	0	1
—— of the Heart,	1	0	Suicide,	1	0
—— of the Lungs,	1	0	Syphilis,	1	0
—— of the Bowels,	0	1	Tabes Mesenterica,	0	1
Drowned,	1	4	Teething,	0	1
Dysentery,	4	2	Ulcerated Sore Throat,	0	1
Debility,	0	4	Unknown,	3	2
Effusion on the Brain,	1	1	Whooping Cough,	0	4
—— on the Lungs,	0	1		—	—
Epilepsy,	1	0		87	164
Erysipelas,	0	1			
Excessive Heat,	6	1	Under 1 year,		108
Fever, Bilious,	1	0	From 1 to 2		27
—— Cerebral,	1	0	2 to 5		12
—— Intermittent,	0	1	5 to 10		10
—— Nervous,	2	0	10 to 15		2
—— Puerperal,	2	0	15 to 20		5
—— Scarlet,	0	5	20 to 30		29
—— Typhus,	1	0	30 to 40		11
—— Typhoid,	1	0	40 to 50		9
Hæmorrhage from Bowels,	0	1	50 to 60		10
—— from Uterus,	1	0	60 to 70		15
—— from Lungs,	1	0	70 to 80		8
Ileus,	1	0	80 to 90		3
Inflammation of the Brain,	1	6	90 to 100		1
—— of the Breast,	0	1	100 to 110		1
—— of the Bronchi,	0	2			—
	—	—	Total,		251
Carried over,	63	115			

Of the above there were 7 from the Almshouse, and21 people of colour, which are included in the total amount.

By order of the Board of Health.

SAMUEL P. MARKS, Clerk.

STATE OF THE THERMOMETER.

	9 o'clock.	12 o'clock.	3 o'clock.
July 12	85	94	98
13	79	84	88
14	78	83	85
15	67	71	72
16	65	72	73
17	66	65	63
18	64	69	73

BRAITHWAITE'S RETROSPECT.

The last number of *Braithwaite's Retrospect* (January to June) contains *a Synopsis*, or short abstract of the practical points and directions embraced in the articles it contains. This is a new feature in the work, which is itself a synopsis of the matters contained in the various medical journals, of which we now have a further synopsis—an abstract of abstracts!

There is no end to the labour saving of the present day. Mental, like physical aliment, is not only collected and prepared for the use of the needy, but it is ready chewed, and even digested, so that the indolent have nothing to do but to swallow!

In the number of the London Medical Gazette for June 5, 1846, there is the translation of an article on *Kiestein* or *Kyestein*, or, as the writer has it, *Kystein*, by Dr. Möller, of Königsberg, in which the author alludes to the researches of our friend and correspondent, Dr. E. K. Kane, but assigns the credit of them to Dr. Kane of Dublin! No correction is given either by the Translator or Editor of the Gazette. The results of M. Möller's researches correspond greatly with those of Dr. Kane. In a subsequent number—for June 12, 1846—is an account taken from the Gazette des Hôpitaux, of the "singular case" of "a physician killed by taking the medicine which he had prescribed for a patient." The sufferer is said to have been "a Dr. Bader, an old and respectable practitioner of Macou." We doubt not that the case will be copied into other journals, perhaps into some on this side of the Atlantic; who may not suspect—under their foreign aspect—that the real sufferer was a Dr. Baber, of Macon, Georgia!

RECORD OF MEDICAL SCIENCE.

On Magneto-Electricity, as a Parturient. By Dr. N. Walkly.

[A Paper read before the Mobile Medical Society, at its meeting in May, 1845.]

As a parturient, I think this agent far preferable to the use of ergot, for this reason, that the pains are regularly intermittent, as in natural labor, and hence will not be so likely to injure the child or mother. It does not appear to act, in these cases, as when applied to other parts of the body, where direct muscular contraction is produced, but rather appears to resuscitate the exhausted energies when applied in protracted labor, and to induce pains and regular labor, after a short application, through the lumbar nerves, in the last months of pregnancy. I will present a few cases demonstrating its parturient effects.

Ou the 3d of February, 1843, I was called to see Mrs. G., who was suffering from severe frontal neuralgia. She had suffered an abortion three years before, since which time her catamenia were irregular, and she had suffered under a continued train of nervous symptoms,—had been carried from one watering place to another,—had been under the care of several physicians, with no benefit. She was, at this time, suffering from the frontal neuralgia above alluded to, affecting the left supraorbital nerve. When she looked at objects with both eyes, she was troubled with double vision; the object seen by the right eye was smaller than the left, though occupying the same place, owing, probably, to the different focal distance of the two eyes. She could not see small print with sufficient distinctness to enable her to read it.

The abdomen was enlarged so much, as to induce me to think that she must be at least five months pregnant, but both her husband and herself informed me that the enlargement was of more than a year's standing. I applied electricity to the nerves affected with neuralgia, without affording more than temporary relief. At nine o'clock at night, I called, and placed her feet in warm water, with the negative pole of the battery, while the positive was placed on the back between the shoulders, and passed a rapid succession of the magneto-electrical shocks for about three minutes, which produced slight pain in the back. I then left her. The pain continued, with increasing severity, until about twelve o'clock, when she sent out for her usual family physician, who was in the immediate neighbourhood. Pains recurred regularly, after his arrival, for about half an hour, when a large quantity of water was discharged from the uterus, and the pains ceased.

On the 7th, I made application in the same way again, which brought on pains, and a further discharge of water, containing floculi resembling the skins of white grapes. I did not see the substance discharged, but I have no doubt, from the description, of their being hydatids. I made the same application every third day for six weeks, with an occasional discharge. She rapidly improved in general health, and

shortly afterwards became pregnant, and has remained in good health until this time.

In February, 1844, Mrs. ——, in the last month of pregnancy, was visiting at my boarding house in New Orleans. She was complaining of rheumatic pains in her knees. My landlady having seen me apply it frequently for rheumatism, got a machine from my room, placed one of the poles in the stocking, over the nerve back of the ancle bone, while she held the other in her hands. She applied it in the same way through both of her limbs. In about thirty minutes she was taken in labor, and I arrived, at dinner-time, just in time to attend to her; the labor was very short, occupying only about thirty-five minutes,

In May, 1844, I was called to see a negro woman belonging to Mr. P——, of this place, who was supposed to have the dropsy, by the family. She informed me that her legs were swelled, and her abdomen had the appearance of fifth month of pregnancy. She had not menstruated since the birth of her last child, which was two years old. She had an attack of bilious fever in the summer of 1843, followed by a protracted intermittent, which held on all winter. Spleen was much enlarged. She had no morning sickness, nor any of the usual signs of pregnancy except the enlargement.

On examination, I found but little enlargement of the legs, except that occasioned by varicose veins on the inside of the thighs, and every appearance of pregnancy. But she insisted that she could not be in that condition; and, thinking that possibly the enlargment might be occasioned by suppression of the menses, I applied electricity, as a direct emmenagogue, by placing the negative pole in foot-bath with the feet, while the positive was placed over the lumbar region, and a succession of shocks passed for about five minutes. No pain was produced. I waited a few minutes and left, directing them to send for me if labor pains occurred In about two hours I was sent for, and found that regular labor pains had been recurring at intervals of about five minutes for half an hour. I found, on examination, the os uteri dilated, and a prospect of speedy delivery. I immediately administered a dose of opium, which suspended the pains. I left another dose, in case of the pains returning. She fell asleep, and they did not recur. A week afterwards, motion of the child was felt. She went her full time, and was delivered of a healthy child. Both mother and child are well.—*N. O. Med. and Surg. Jour.*

Obstetrical Cases in recent Practice. By A. Alpuente, M. D., of New Orleans.

Case 1. *Difficult Labor—Convulsions—enlargement of the os tincæ by incision—success.* On the 4th of April last, about 7 P. M., I was called to visit a female slave in Philippa street. She was stout, and had enjoyed good health. In the night preceding my visit, she was taken with vomiting, and, towards 5 o'clock, with convulsions; on my arrival I found her in the following state. Her pregnancy had arrived at the last stage; the convulsions with which she suffered, partook of the character of epilepsy; they were due, from all appearances,

to congestion of the brain, the result of a first labor. On examination, the neck of the uterus was found entirely obliterated, and the os uteri itself barely pervious. Venesection was now resorted to, an anti-spasmodic potion, and a full bath.

At 10 P. M., I visited her again; she was in the same state: there was no dilatation whatever; the contractions of the uterus were strong in the extreme. Two blisters were now applied to the calves of the legs, and an enema of castor oil and assafœtida, administered. After another examination, I requested the aid of another physician, and named Dr. Daret.

At half past 12 I met Dr. Daret; the same symptoms persisted. We now examined the woman with the speculum; the *os tincæ* was reduced to a size barely sufficient to admit a small probe; the neck of the uterus was entirely obliterated; every trace of it had gone, excepting this small aperture which seemed to indicate its position.

After mature deliberation, we concluded that an operation alone could extricate the woman from her great danger, and that immediate delivery was required to put an end to the puerperal convulsions: we demanded, however, the advice of a third physician, and Dr. Guesnard was named. With the exception of the blisters, the same prescription was repeated.

At half past two o'clock we met Dr. Guesnard; at that moment our patient seemed to be in a more favorable situation; the puerperal convulsions had ceased a few moments before our arrival. The speculum was re-applied, but in consequence of the movements of the patient, it was difficult to detect the aperture which marked the seat of the os tincæ; on careful inspection, Dr. Guesnard found the aperture immediately behind the arch of the ossa pubis, and sufficiently dilated to admit the introduction of the finger, by which he was enabled to ascertain that the presentation was that of the vertex. In consequence of these favorable changes, Dr. Guesnard was of opinion that the labor would terminate naturally; every thing in fact, seemed to announce a favorable result. The two consulting physicians then retired, without fixing any hour for future consultation, deeming it unnecessary.

At 5 o'clock I again saw the patient; the puerperal convulsions were very strong, and the *os uteri* was no more dilated than when we left her. Dr. Daret was called again.

At 8 o'clock I again met Dr. Daret; we sent immediately for Dr. Guesnard: the immediate termination of the delivery was now deemed of absolute necessity, since twelve hours had elapsed, and the convulsions still continued.

At 11 o'clock, Dr. Guesnard not having yet been found, and as the convulsions were much stronger, we called on Dr. Tricou. Before the arrival of Dr. Tricou, the convulsions ceased again, and the woman relapsed into about the same state that she was in when Dr. Guesnard first saw her. Dr. Tricou now thought it advisable to postpone all interference for a few hours longer. The extract of belladonna was, however, applied to the *os uteri*, an anodyne enema administered, and venesection again resorted to.

The convulsions soon returned, and at half past 12 o'clock the operation was decided on. The patient was now placed on her back, at the edge of the bed, in the usual position for such operations, and being properly assisted by the attendants, I now introduced through the highly contracted *os tincæ*, the index finger, conducting upon it a probe pointed bistoury, with which I made three incisions, one of about six lines posteriorly, which was directly under the arch of the ossa pubis, and two lateral ones of about four lines each in length ; I then introduced my hand slowly into the uterus, and applied the forceps, as we had agreed upon before the operation. When the head was passing through the os externum, the perineum was put severely on the stretch, which induced us to make a few slight incisions on the posterior part of the *labia pudendi* in order to prevent rupture. The contractions of the uterus was strong, and the placenta was thrown out immediately after the delivery of the child. Unfortunately the child was born dead; we instantly resorted, nevertheless, to all the means which might have contributed to the restoration of life had it been only asphyxiated.

All the nervous symptoms ceased as soon as the delivery was over, but the debility which now ensued was extreme, the pulse was small, and between eighty and ninety. The loss of blood was not greater than in any ordinary accouchement. At half past three o'clock I retired, leaving our patient in as satisfactory a condition as could be expected. The next morning, at our visit, we found her in the following state: the skin was dry ; the abdomen distended and very sensible ; general prostration of strength ; the pulse was small and frequent; there was very little discharge of blood ; there was also retention of urine, which was relieved by the catheter. Poultices were now applied to the abdomen, sinapisms to the lower extremities, and a tonic mixture was ordered. The blisters were also dressed, a hip-bath provided, and a cathartic enema prescribed. By three o'clock a great improvement had taken place; the pulse had become nearly natural, her strength had improved, and she returned rational answers to all our questions. On the 6th, the abdomen had resumed its natural dimensions, the pulse was about the same, her intelligence had revived, although there was still some tendency to collapse. The catheter was now again resorted to, and a hip-bath, poultices, a laxative enema, emollient injections, cooling drinks, and chicken broth prescribed. On the 7th, the satisfactory condition of the patient continued the whole day, but on the 8th, there was some slight tension and tenderness of the abdomen, but the urine had been freely evacuated; her pulse was also frequent. Eighteen grains of calomel were now prescribed, to be followed by the enema; and the hip-baths, the poultices and the injections were ordered to be repeated. About 12 o'clock this day, two clots of blood were discharged, after which a striking improvement took place. At night, however, the abdomen was again painful, and the pulse frequent and full; the *decubitus* was also unfavourable ; there was suppression of the lochial discharge. Sinapisms to the thighs and feet, and a tonic mixture, were now or-

dered. On the 10th, the pulse was from seventy to eighty, and rather small, the pain had nearly entirely left the abdomen, there was some heaviness of the head, but the evacuations were natural, the countenance was good, and her intelligence had returned; the cooling drinks, the enemata and injections were again prescribed, together with cold lotions to the head, and a hot foot-bath. After the 11th, the improvement of the patient was progressive; slight purgatives were administered from time to time, and at the present moment, she is in the enjoyment of excellent health.

Case 2.—*Premature Delivery of Triplets.*—On the 19th of September, at 11 A. M., I received a call to visit a poor woman, who had been delivered, during the previous night, of three girls. She had not completed the full time of her pregnancy; labor had come on between the seventh and eighth month; during her confinement she had received no assistance whatever, either from midwife or physician.

I immediately repaired to the corner of Esplanade and Claiborne sts., and there I found a woman about 40 years of age, habituated to hard labour. She is the mother of four children, and had, previously to her last confinement, two miscarriages, shortly after which she became pregnant again. On the 18th, she felt unusually fatigued after her daily occupations; she also felt some pains in the back and about the uterus, but did not think assistance of absolute necessity. In the night, however, the pains increased, and at half past 12 she was delivered of a girl, which presented the feet; after the lapse of half an hour, she was delivered of *another girl*, the vertex of which presented; and about a quarter of an hour afterwards, the placenta and membranes came away, enveloping *a third female infant.* All these children were delivered alive; the last, however, survived but a few minutes, the second died at 9 o'clock the next morning, and the first died on the 20th, at 12 o'clock.

The size of the children was as follows:

Length, from the top of the head to extremities of the toes, extended, 16 inches.

Occipito-frontal diameter of the head, 4 inches, 2 lines.

Occipito-mental diameter of the head, 4 inches, 6 lines.

Bi-parietal diameter of the head, 3 inches.

On my first visit, the woman was rather weak; her pulse was small and frequent, the perspiration was profuse, (she was delivered in a feather bed,) the hæmorrhage was moderate, the uterus still tolerably large, and occupying the left hypochondriac region. On examination, the neck of the uterus was soft, and the *os uteri* small—so diminished in diameter, that I could not succeed in passing my fingers, in order to ascertain within, the cause, if any, of its contractions, which I attributed to the extreme distension that it had previously undergone. I prescribed previously to my departure, a tonic mixture, infus. tiliæ, and chicken broth for nourishment. The next day she was better, and continues to do well.

This is the second case of triplets which I have seen in this city.

About two years ago, I was called to visit a woman who had miscarried at the sixth month. In this case there were two male infants enveloped in the same membrane; they were both born dead. The remaining infant was a female, which was contained in a separate sack; it lived but a few minutes. My services were required on account of the attending hæmorrhage, but the recovery of the patient was speedy.—*N. O. Med. and Surg. Journ.*

Remarks upon the Hemostatic Virtues of the Brocchieri Water.—This celebrated *quack nostrum* was brought to the notice of the Medico-Chirurgical Society of Louisiana, at its sitting in March, by a communication from one of its venders, accompanied by some bottles of the article, with the request that the society would examine and report upon its styptic powers. The society decided (we think very properly) that it would be setting a *bad precedent*, and respectfully declined the offer. Several of the members, however, determined to avail themselves of the earliest opportunity to test the virtues of the remedy, as it had attracted so much notice both in the medical journals and newspapers of the day. We have been kindly favored by Dr. A. Mercier, with the following account of his first experiments with the article, which we have translated from the French:

"*Messrs. Editors.*

"Gentlemen:—At a time when experiments with the '*Eau de Brocchieri*' seem to be the order of the day, permit me to communicate one or two facts which a happy chance threw in my way, and which seem to be of sufficient importance to demand a passing notice.

"Without alluding to all that has been said in relation to the styptic virtues of this water, I resolved to test it for myself; a few days since I was enabled, by good luck, to put the matter to the test of experiment. A French *cuisinier*, when washing a glass, broke it in his hands, and wounded the right index finger. In spite of all the means that were employed on the spot, such as cold water, salt and water, cob-web, the hæmorrhage continued for four hours. At the end of this time he came to claim my assistance, and on removing the dressings, I saw, upon the internal edge of the right index finger, about the middle of the first phalanx, a wound between five and six lines in length, (a piece of the integuments being completely detached) and penetrating beneath the cellulo-adipose tissue which constitutes the pulp of the finger. One of the small anastomotic branches of the index finger was opened, and poured out a constant stream of arterial blood. This I deemed a favourable case for the '*Eau de Brocchieri.*'

"I saturated some lint with this water, and applied it to the wound, recommending the patient to use slight compression. I occasionally poured a small quantity of the Brocchieri water over the lint as it lay on the wound. At the end of seventeen minutes I removed the compress of lint, and found the hæmorrhage as profuse as at first. I then

applied two small compresses, one along the internal and the other on the external border of the index, confining both with a bandage. I then lightly cauterised the wound with the nitrate of silver. In five minutes I removed the compresses; the hæmorrhage did not reappear; I then covered the wound with cob-web, confining it with a bandage. I saw the patient nineteen hours afterwards, and no hæmorrhage had reappeared.

"Shortly after this experiment was made, a coloured man presented himself at my office, with a deep wound in the thenar eminence, about an inch and a half in length, in the direction of the axis of the thumb. He had, according to his account, lost about two pounds of blood, and the hæmorrhage was then considerable. In the midst of a mass of muscle which formed a hernia through the wound, I saw the blood spouting, per saltum, from three different points. The muscular branches distributed to the thenar eminence had evidently been opened. After carefully cleansing the wound, I saturated some charpie with the *Eau de Brocchieri*, applied it, and covered the whole with a compress, over which I poured, at short intervals, the *Eau de Brocchieri*. At the end of more than half an hour, in the presence of Dr. Beugnot, who, having heard of my good fortune, came to witness these experiments, I removed the dressings, and we found the hæmorrhage as profuse as before the application. Without pushing these experiments any further, we applied one or two sutures, drew the wound accurately together, and arrested, on the instant, the hæmorrhages. The bleeding did not return. The pain which these two patients experienced from the application of the *Eau de Brocchieri*—a pain incomparably greater than that from the application of strong salt and water, or any other styptic solution, together with its utter inefficacy in cases of hæmorrhage, have induced me to abandon any further trials with it, except, perhaps, in cases of hæmorrhage from *mucous* membranes, as from the nose, rectum, &c. &c., which are so common in this country. MERCIER.

New Orleans, April 9th, 1846.

Ibid.

Hospital Necker.—Clinical Lectures on Diarrhœa of Infants.—By PROFESSOR TROUSSEAU.—The influence of the change of seasons is very strongly felt in hospitals destined to infants. During the course of the winter a numerous series of pulmonary and cephalic disorders has passed before us; we are entering now into spring, and the coming heat will bring with it intestinal affections. Soon, perhaps, you will not in one month meet, in these wards, with a single case of pneumonia, twelve or fifteen cases of which were admitted during every month of the winter. Thoracic diseases will be replaced by abdominal symptoms, and amongst these diarrhœa being the most frequent, the most difficult to treat properly, and the least understood, we will endeavour to prepare you beforehand for its observation by some remarks upon its pathology and treatment.

The subject is extremely difficult, and although I have for eight years devoted myself to a daily study of the maladies of infancy, I feel myself in the dark with regard to many of its details, and do not therefore, pretend to give you a completely satisfactory description, but merely to impart the little I do know of the matter. In order to introduce some regularity in the following remarks, we deem it necessary to establish a practical division between the various sorts of diarrhœa which are observed in children. We acknowledge only four primary forms of diarrhœa. 1, bilious diarrhœa; 2, mucous diarrhœa; 3, lienteric diarrhœa; and 4, choleriform diarrhœa, or cholera infantilis. These forms are perfectly distinct from each other, and all the varieties of diarrhœa which may be observed in children, and which do not seem at first to have a place in our classification, will be found to consist of combinations of several of these original forms, or of deviations from these elementary types.

Causes.—Bilious diarrhœa may consist in a simple increase of the biliary and pancreatic secretions, or in a pervertion of their qualities. Both may result from local irritation, but the first is often produced by mere physiological excitement. We will find a double illustration of these pathogenic influences, in the abundant flow of saliva determined by stimulation of the mouth with mercury, and in the increase of the secretion of tears caused by sorrow. Thus, slight inflammation of the stomach or duodenum will occasion a discharge of bile into the intestine; thus fear, anger, nervous excitement, in a word, will also produce an increase of the biliary, pancreatic, and sometimes the renal secretions. We may say we meet with daily examples of the great power of physiological stimuli on the conglomerated glands. The diarrhœa of the young soldier who goes into action for the first time, is another common instance of the same kind, a further illustration of which we find in the influence of dreams on the spermatic organs. Violent exercise, abundant perspiration in many persons bring on diarrhœa. In the water-cure, a method of treatment too advantageous in some diseases to be entirely left to quacks, we find that during the process of packing, if the patient is made to drink several tumblers of water, abundant perspiration is thrown out, but if diaphoresis does not appear, the mucous surface of the intestine substitutes its action to that of the skin, and relieves the system by diarrhœa. One of the most frequent causes of diarrhœa will be found to reside in the quality of the food. The presence of globules of colostrum in the nurse's milk, due, as Donné has proved, to latent irritation of the mamma, sudden weaning, the exhibition of improper food, are all circumstances by which diarrhœa may be occasioned in the infant. The habit of covering the child in bed with too warm clothing, is also a frequent cause of disease. This is unfortunately a habit very prevalent amongst the lower classes in this country. So many as four blankets are thrown over the child, who is besides enveloped in swaddling clothes; and to add to the child's comfort, the mother not unfrequently adds her pillow to his other clothing. Abundant perspiration is thus produced, and, without any

regard for the consequences, the child is extracted from his bed to be suckled or cleaned, thus being exposed several times a day to sudden changes of temperature, the result of which is pulmonary disease in winter, and intestinal derangement in summer.

Semeiology.—Bilious diarrhœa generally follows slight feverishness, and is often preceded or accompanied by vomiting. The mouth is bitter, the tongue foul, and the appetite absent. The colour of the motion varies from yellow to green, according as the biliary secretion is changed in its quality, or only increased in quantity. Its duration is from three to six days, and its termination favourable, unless the case is mismanaged. It is in fact a slight catarrhal condition of the mucous surface. Mucous diarrhœa is marked by the discharge of a new secretion from the bowels; it is often the consequence of the first variety of disease, or of indigestion. The nutriment acts as a foreign body upon the intestine, producing local irritation, and the excretion of a slimy mucus. This is a very common, and fortunately not very dangerous form. But when the irritation of the digestive tube is carried beyond certain limits, matters take a more serious aspect; enteritis sets in, and the products of inflammation are passed with the motions. Colitis occasionally makes its appearance, attended with intense pain, betrayed by cries uttered two or three minutes before the motions, with which a small quantity of blood is sometimes mixed, the dejections assuming a dysenteric character. When the small intestine alone is inflamed, our third form of diarrhœa, lientery, appears. In this variety the food passes unaltered through the digestive organs, and is recognisable in the dejections, in which grains of rice, vegetable substances, curdled milk, can be readily distinguished. This is an extremely dangerous derangement, on account of the impossibility of refection.

After one of the above kinds of diarrhœa, occasionally without them, the cholera of children—that almost invariably fatal affection—is observed to show itself. Aftar dejections of a bilious or mucous character, the infant is suddenly seized with violent vomiting, against which the efforts of art remain unavailable. A watery diarrhœa of a greenish hue is at the same time discharged from the bowels, and alarming general symptoms are noticed. The eyes sink in the orbits, the features are decomposed, the complexion becomes livid, and the nose, tongue, extremities, and even the breath, grow cold; the cry is acute, small, and incessant; the skin loses its elasticity, and when pinched in any part of the body, retains the folds made by the fingers, as if it were become an inert membrane. The child is sleepless, but without convulsions. Such are the first symptoms of this formidable malady. In its second period the vomiting, and sometimes the diarrhœa, cease, but no amendment follows. The collapse increases, and the infant almost invariably dies. We have, however, occasionally had the consolation of saving some few cases; one is at present in the wards, to whose case we called your attention, and who owes his recovery, under Providence, to the double tartrate of soda and potass.

Treatment.—We have found few drugs of any avail in the treatment of the bilious diarrhœa in children. It is a convenient plan to call the malady a gastro-enteritis, because the denomination leads to an invariable line of treatment, accessible to understandings of the meanest capacity. We take, however, a different view of diagnosis generally, and deem it unprofitable unless it leads to some practically useful indication. Some forms of diarrhœa are doubtless less difficult of cure than others, but we must say that the varieties we have described often combine with each other, so as to cause the practitioner no small embarrassment, and to reduce him, in many cases, to a blindfold empiricism; not but that we profess much respect for that empiricism which teaches us to exhibit mercury in syphilis, steel in anemia, and bark in ague; but the empiricism we deprecate as a contemptible method is that which is not guided by diagnosis. The method we refer to may become a useful guide to the detection of the nature of disease, and it then acquires a considerable degree of utility. Let us remind you of a case of hemicrania at present in the wards. The attacks were periodical, and we tried sulphate of quinine without success; thus acquiring the knowledge that it was not governed by miasmatic influence. We exhibited then mercurial preparations, and the nervous headache having yielded at once, we were lead to attribute the disease to syphilis. This is the empirical method we adopt; it is not the empiricism of *experiment*, but of *experience*. Thus, if we say that a patient is affected with neuralgia, we express a diagnostic opinion which is as elementary, and, let us add, as useless, as to say that he is affected with a corn on his foot; but it is quite another sort of thing to say that the patient is labouring under gouty, syphilitic, miasmatic, rheumatic, or chlorotic neuralgia, because this kind of diagnosis leads us to the real therapeutic indications. To return to the treatment of diarrhœa: Let us not forget that, to arrest the superabundant intestinal secretion is not by any means to cure the complaint which caused it. It is our opinion that bilious diarrhœa is only a very superficial catarrhal derangement of the intestine. The most efficient treatment consists in the exhibition of neutral salts, such as the double tartrate of potass and soda, phosphate of soda, Epsom or Glauber salts. We do not wish you to understand that we recommend the use of purgatives. No; castor oil and magnesia, or manna, you will usually find unsuccessful, whereas the neutral salts generally produce a speedy amendment. We have also derived benefit from the exhibition of the pulv. ipecac., at doses varying from two to ten grains, and mixed with a little jam, milk, or simple syrup. The action of this medicine is threefold: it is a substitutive, a discutient, and being a diaphoretic deviates towards the skin those vital energies which are occupied in the production of morbid symptoms in the alimentary canal. But when the bilious diarrhœa is the consequence of mere nervous excitement—when it is caused by fear or anger, as tears by grief, or salivation by appetite—opium gives relief in a very short time. In these cases, which you will find to be characterised by the absence of any sort of suffering

during the first twenty-four or thirty-six hours, the disease will speedily yield to the influence of hypnotic medicines. Half a drop of Sydenham's laudanum is a sufficient dose for a child under six months; others, it is true, will bear two or three drops, but that dose is too powerful a narcotic for the many, The laudanum should be dissolved in an ounce mixture, whereof the infant shall take a teaspoonful every three or four hours; but when the disorder has lasted beyond the specified time, opium ceases to possess its salutary effect, because the mere presence of the increased secretions on the mucous surface has sufficed to bring on an irritation which did not exist at first. Then we must again have recourse to neutral salts.

In mucous diarrhœa we have generally derived benefit from three sources: saline purgatives, calomel, and rhubarb. The dose of calomel we recommended is one-fifth of a grain daily, mixed with half a drachm of sugar. This should be continued two or three days at furthest. As to rhubarb, it is the "syrup" we use, the so-called "sirop de chicorée"—a good preparation in everything but its absurd name, which insinuates the idea of the efficacy of the endive, which is, on the contrary perfectly, inert. Great attention should be paid to the child's diet; his food, less abundant than usual, should be chosen with great care. Milk is the most proper food for young children; fecula and broth also may be given after the expiration of the first year, and the drink should be in small quantity. In the choice of food the physician must also allow himself to be guided, in a great measure, by the idiosyncracy of the child, and the mother's remarks on the peculiarities of his appetite.—*London Medical Times.*

Composition and Nutritious Properties of Coffee. By M. Payen.—M. Cadet de Vaux and M. C. de Gassicourt fancied they had discovered in coffee gallic acid, a resinous substance, albumen, an aromatic essence, and mucilage; these substances present, however, only doubtful analogies with the well-defined elements of coffee. Caffeine, discovered by Runge, and described by Robiquet, is a crystallisable and azotised body, easily sublimated into white brilliant crystals, and appears identical in nature with theine, since detected in tea-leaves. Robiquet, besides, described with precision the effects of torrefaction on coffee. The researches of Liebig appeared to show that coffee contained in reality but little or no nutritious matter; and M. Payen, on the contrary, endeavors to demonstrate that the infusion of coffee contains several azotised principles, in quantity equal at least to ten times the amount admitted by Liebig; and that saline and fatty substances, of a nutritious nature, may also be therein detected. According to M. Payne, the most remarkable of the immediate principles of coffee had not hitherto been discovered—a fact which is accounted for by the extreme facility with which that principle is altered by chemical operations. Its most interesting alteration consists in the production of a fine green colour, which betrayed the presence of the unknown substance to M. Payen, and led to its separation in the shape of a white crystalline matter, which imparts a deep green hue

to five thousand times its weight of water or alcohol. M. Payen has by experiment ascertained that torrefaction, according to its degree, removes from coffee 15 to 25 per cent. in weight, and adds to its volume from 30 to 50 per cent. With regard to the nutritious properties of the infusion, M. Payen asserts that the infusion of 100 grammes of coffee in 1000 of water contains 20 grammes of nutritious matter, three times more than the same quantity of tea, prepared with 20 grammes to 1000 of water. If milk be added to it, the result will contain six times more solid matter and three times more nitrogen than broth.—*Ibid.*

Professor Faraday on the Cohesive Force of Water.—This was the last evening meeting, for the season, of the members of the Royal Institution, and on this occasion Prof. Faraday gave an interesting lecture on the "Cohesive Force of Water." The lecture was so strictly experimental, that we can do little more than give the heads of some of the most striking illustrations which were brought forward.

The Professor first adverted to the three conditions of water, as ice, water and steam. Bodies which appeared perfectly liquid were, in reality often in a transition state, *i. e.* ready to take on the solid form from the slightest mechanical disturbance in their particles. This was well known to be the case with a saturated solution of sulphate of soda which might be kept for a year in the state of a perfect liquid like water, but would in an instant, from any mechanical cause, such as mere agitation or the addition of any solid, become converted to a crystalline mass. There was a somewhat analogous condition with regard to liquids, and vapours discovered by M. Cagniard de la Tour, and known under his name. At a certain temperature a liquid under sufficient pressure becomes a clear, transparent vapour or gas, having the same bulk as the liquid.

Water, as a liquid, was supposed at one time to be destitute of all cohesive force, but the slightest attention to its properties proves that this is an error. When solids are immersed in water, a certain portion of the liquid adheres to them, and this is called adhesion. This, however, only refers to the mere film of liquid on the surface of the solid; and as a drop or globule can be accumulated, it is obvious that the particles of water must have among themselves, a strong force of cohesion, since they are able to resist the power of gravitation. Various experiments have been devised for the illustrations of this property. Among others the familiar one of balancing a smooth glass plate, having a known area, at the end of a scale beam, bringing this plate in contact with a surface of water, and then observing the weight required in the opposite scale to raise it. It will be found to be much more than an equivalent to the weight of the glass plate, provided care has been taken by covering the surface of the glass with a thin layer of soap, to ensure perfect contact. Laplace thought that the weight required to lift the plate was an index of the force of cohesion between water and glass, but this is not the true explanation. The weight added to the opposite scale really indicates the

cohesive force existing among the particles of water themselves; for before the plate is detached from the surface, it will be seen that a mass of water is actually raised up, forming a well-marked curve with the surface of the liquid. Some ounces are thus required to lift a plate exposing an area of twenty-five square inches.

The Professor next adverted to some remarkable experiments performed by M. Donné, a Belgian plilosopher, and M. Henry on the cohesion of water. Donné found that if water were enclosed in a tube bent at right angles, and hermetically sealed on the principle of the water hammer, provided there be no air in a free state, and one leg of the tube is completely filled with water, it might be inverted, *i. e.* turned with the angle downwards, without the water finding its level on the usual hydrostatic law. This experiment was shown: and it was thus rendered apparent, that there was a great force of cohesion in water, since a column of twelve or fourteen inches in height, and three quarters of an inch in diameter, was thus sustained against gravity. When, however, the tube was gently shaken, a bubble of air, hitherto dissolved in the water, was dislodged by the concussion, rose to the surface of the water, and this immediately fell until the hydrostatic equilibrium was established. When another tube containing water free from air was taken, it was found impossible to dislodge the column of water, or to produce the effect of the water-hammer, without incurring the risk of breaking the tube. M. Henry had calculated from certain experiments that the cohesive force of water was equal to some hundreds of pounds pressure. He also made the remarkable discovery that the boiling point of water, entirely deprived of air by shaking it in the manner above described, was no less than 275° ; and that when this temperature was reached, a large body of steam was suddenly generated with explosive force, much in the same way in which the boiling of concentrated sulphuric acid is observed to take place. The boiling point of water is thus raised to a temperature equivalent to a pressure of three atmospheres, or forty-five pounds on the square inch. This result, therefore, enables us to form an idea of the power whereby the particles of water are held together; for it is undoubtedly the force of cohesion among them which enables them to resist the action of heat until so high a temperature has been reached. Were it not for the air contained in it, water would not boil at 212° ; and the operation would be attended with considerable danger, since, when deprived of air, the boiling of this liquid is accompanied by a violent explosion.

Water is repelled by the surfaces of numerous solids, and in this fact we have an additional illustration of the great cohesive force among its particles; for the liquid invariably settles in globular masses or acquires a convex surface. The dew on the leaf was a well-known instance; but there is another remarkable illustration of this property, in fact that the meshes of fine wire gauze are not traversable by water, notwithstanding its perfect liquidity. This was proved by pouring water into a small cylindrical vessel made of copper-wire-gauze. The water remained in it without flowing out, just

as ifthe sides were formed of solid matter, instead of being perforated with an infinite number of holes. It was not until the vessel was shaken that a communication could be established with the outside, and the water flowed away. A strong cohesion might be set up between water and metal by covering the top of an open jar with fine wire gauze and moistening the surface. A thin film of water was locked up in each mesh of the gauze ; and so strong was the cohesion, not merely of the water to the metallic copper, but of the particles of water themselves, that atmospheric pressure was resisted, and the vessel plunged into water and raised, was now capable of supporting a column weighing several pounds. Professors Faraday then showed that water would not traverse fine wire-guaze, so long as this was at a red heat or near it. A cup of very fine wire-gauze was heated to redness, and some water poured on. It rolled over the surface like a rounded mass of quicksilver, so long as the heat was maintained ; but when the lamp was withdrawn, and the wire allowed to cool, the water speedily traversed the meshes, producing an abundance of steam.

It is an old and well-known fact, that water will lie upon red hot surfaces without boiling or producing any perceptible quantity of vapour. The same law applies to all liquids. Water was poured on a red hot vessel, and it remained like quicksilver in constant motion, but without producing visible steam. In all these cases there was no immediate contact between the liquid and red hot metal. Contact was entirely prevented by the interposition of a thin film of very dry vapour : and it had been found, singularly enough, that the liquid while on the red hot metal, and not in contact, had a temperature several degrees below its boiling point. Thus water had a temperature of only 205° ; and although it underwent rapid diminution by passing off in vapour, yet this vapour, unlike ordinary steam, was perfecly invisible, owing to its being intensely dried, and probably passing at once into an atmosphere, strongly heated by radiation from the heated vessel. When the heat was withdrawn, and the metallic vessel had cooled to a certain degree, there was immediate contact between it and the liquid ; and the greater part of the latter was suddenly dissipated in steam. This was well known to be one cause of the explosions of steam-boilers. A similar experiment was then performed with ether, which is equally repelled by red hot metals ; the vapour, however, became easily ignited : but the fact of non-contact was beautifully illustrated not merely by the sight of the liquid ether rolling like mercury within the interior of the flame, but by the sudden evolution of a much larger quantity of ethereal vapour, manifested by an increase of the flame, when the vessel was allowed to cool, so as to establish contact of the liquid with the metal.

M. Boutigny has called this the spheroidal state of bodies. It is a most singular condition of matter, and the property leads to some very remarkable and unexpected results. Thus, with regard to iodine, this is well known to be a solid, giving off at a gentle heat richly coloured violet vapours. If iodine be thrown on red hot metal (platina) it

melts and forms a spheroidal mass, giving off a small quantity of vapour. It has the appearance of a black liquid; and there is evidently no contact. When the vessel is allowed to cool, contact takes place, and this was indicated by the sudden burst of a large quantity of vapour of iodine from the surface of the metal.

By taking advantage of this principle M. Boutigny succeeded in freezing water in a red hot crucible, an experiment which excited considerable attention at the last meeting of the British Association. Professor Faraday then performed the experiment by making a platina crucible nearly red hot, and pouring into this, anhydrous sulphurous acid, and immediately afterwards an equal quantity of water. There was no contact between the liquid sulphurous acid and the hot metal. The acid boils at 14° F. and the evaporation is so rapid, that it cools the water poured upon it to a degree considerably below the freezing point, so that it became instantaneously a mass of ice. The lump of ice was thrown out on the table. The ice thus formed is in fact a solid hydrated compound of sulphurous acid and water, but the same effect is obtained by plunging a tube containing water into the acid,—only it requires a longer time for the freezing, and the vapour of sulphurous acid is highly suffocating. Caustic potash poured over the table tended to fix the acid and prevent the diffusion of the vapour.

It is worthy of remark, that the temperature of all liquids in the spheroidal state is a little below that at which they boil; and they pass into the spheroidal state at a temperature which is low in proportion to the lowness of their boiling points. Thus ether becomes spheroidal on metal, when only moderately heated, and retains this condition for a considerable period; while water requires a much higher temperature in the metal, and soon wets it by adhesion. Hence in freezing water in anhydrous sulphurous acid, it is not necessary to heat the metal very intensely; because this liquid assumes the spheroidal state at a comparatively low degree of heat.

In carrying out Boutigny's experiments, Professor Faraday ascertained that even mercury might be frozen under these circumstances; although the degree of cold required for this purpose is well known to be 72° below the freezing point of water. A platina crucible was made hot, and several lumps of solid carbonic acid were put into it. Ether was then poured upon the carbonic acid and a cold bath in a spheroidal state on the hot metal was thus procured, equal, in the air, to a temperature of 106° below zero; and under these circumstances the vapour of æther was not inflammable. A ladle containing liquid mercury was then introduced into the bath; and in a few seconds it was completely frozen to a solid hard button of metallic mercury! In this way, several portions of the liquid metal were successively frozen. This remarkable experiment, which was here for the first time performed in public, shows that by following out the principles of scientific discovery, results may be obtained which *à priori* appear absolutely impossible, and contrary to the laws of nature.—*Lon. Med. Gaz.*

The Differential Characters of Measles and Scarlatina—Semiotic Value of the Expectoration in the former.—Two patients affected with measles, under the care of M. Chomel, gave him an apportunity of drawing attention to the differential characters between this eruption and that of scarlatina; and of pointing out a character, peculiar to measles, by means of which, in case of doubt, the existence of the latter affection may be determined with certainty. The characters of these two eruptions, when well formed and distinct, are so well known that we need not stop to describe them; but it sometimes happens that the rash in scarlatina, instead of exhibiting a distinct, uniform redness, presents a punctuated character so similar to that of measles, that, without some degree of attention, they may readily be confounded. The following are some of the characters, by means of which this confusion may be avoided. The red points of scarlatina are equal, uniform and symmetrical. Their colour is everywhere the same, as is also the size and form of the small vesicles. In measles, on the other hand, the red points exhibit great diversity in their colour, form, and dimensions. In scarlatina there are very generally observed small miliary papulæ, which are not usually met with in measles; and fine, small subcutaneous ecchymotic spots are found in the latter, which are wanting in scarlatina. But these shades of difference, as may readily be supposed, it is not always easy to appreciate, and yet it is of importance to distinguish them, not only as regards the prognosis, but as guiding us in the selection of such prophylactic means, as we may have to prescribe in families, where one or other of these highly contagious diseases is prevalent. There is another character which we are not aware has been described by any author, but to which M. Chomel attaches the very greatest importance in a diagnostic point of view, and that is the appearance of the sputa in those affected with measles. These sputa consist of opaque nummular masses of a greyish colour, floating in a large quantity of fluid; at first sight they have all the appearance of the sputa in the second stage of phthisis; but besides the concomitant circumstances which are sufficient to guard against a mistake as to their nature and origin, the sputa in measles differ from those in phthisis in this, that whilst the fluid in which the opaque matter of the latter floats is clear, in the former it is obscure and lactescent.

This peculiar character of the expectoration, according to M. Chomel, is never absent, and though not mentioned by authors, it is perhaps because they have in general described measles as it occurs in children, and who, as is known, do not expectorate. This character, then, is of great value, in a diagnostic point of view, not only as a means of distinguishing, in doubtful cases, measles from other affections which have a great resemblance to it, but also as a means of diagnosis in those cases where the eruption has become suddenly suppressed, been imperfectly developed, or altogether wanting. It is by no means rare, especially in epidemics, to witness cases in which all the preliminary symptoms of measles may have been present, without any subsequent change manifesting itself in the skin; the slight

bronchitis which almost constantly accompanies the eruption, is the only morbid phenomenon which succeeds to these initiatory symptoms. The appearance of the sputa which we have just described, will, in such cases, leave no doubt of the existence of a latent rubeola; such have been described by the ancients under the name of morbillary fever, *morbilli sine morbilis;* they might, however, with more propriety, be designated internal or bronchitic rubeola.

The following case will exhibit the value of this sign:—

A young man was admitted into the Hôtel-Dieu in such a state of stupor and oppression, that a typhoid affection was suspected. He had none of the rosy spots, however: and there was neither meteorism, nor tenderness of the abdomen. After a careful examination, an irregular violet-coloured eruption was discovered here and there upon the chest. It did not exhibit any of the appearances of the typhoid eruption, but rather resembled a morbillary eruption, which had reached its latter stage. The true nature of the eruption, however, was doubtful; but all incertitude was speedily removed, by the sputa presenting the characters we have above described. The subsequent course of the disease fully justified the correctness of the diagnosis.—*Monthly Jour. of Med. Science, from Gazette Médicale.*

Auricular Hemorrhage following Suppression of the Menses.—Such is the title of an interesting observation that M. Alibert of Castelnaudary has published in the *Journal de Médecine et de Chirurgie de Toulouse.*

Paule Encely of Saint Amans, aged 45 years, experienced nine years ago a sudden stoppage of the menses, following the application of cold to the feet, or agitation, and perhaps both. The menses have not appeared since that time, but she became deaf, and every month there flowed from the right ear an ounce and a half of blood. The discharge continued twenty-four or forty-eight hours, and ceased spontaneously. It was announced by certain premonitory symptoms, which custom had taught the woman indicated an approaching flow of blood, consisting of an inconvenient sense of weight in the head, noises, and a sensation as if numerous ants were buzzing in the ear affected. The patient herself observed the regular periodic nature of this discharge, and understood that it was supplied by nature to compensate for the absence of the menses.

At present, this loss of blood no longer retains its menstrual type. It came back at indeterminate intervals, and differs more or less from the quantity formerly discharged. This irregularity is accompanied by violent cephalalgia, fugitive vertigo, dimness of sight, and, in short, a congestive state of the brain. The general health is otherwise perfect.—*Ibid, from Encyclographie Médicale.*

Clinical notes taken in the Parisian Hospitals.—Asthma.—According to M. Cruveilhier, the essential pathological condition of asthma does not consist in pulmonary emphysema, as is generally believed, but rather in spasm of the bronchial vesicles, which renders respira-

tion incomplete. In fact, pulmonary emphysema is often wanting in asthmatics; it does not exist in a patient just now in M. Cruveilhier's ward, and yet the accessions at night are in her extremely grave; the respiration is sibilant, which, according to that Professor, is dependent on spasmodic contraction of the bronchial vesicles. One of the characters he has observed in asthmatics is a sense of compression in the chest from before backwards. He has more confidence in bleedings than in ammonia in combating this affection.

Digitalis.—M. Andral prefers administering digitalis by the rectum in the form of infusion. Hence he is obliged to prescribe large doses to obtain any effect. In a patient with diseased heart, he is giving this moment two grammes (40 grains) a day, infused in eight ounces of water as an injection. This mode of absorption, from its uncertainty, cannot be so valuable as that by the stomach.

Variola.—According to M. Chomel, the eruption of variola does not fade away in the order of its appearance. That on the arch of the palate, and on the other mucous membranes, vanishes first, then that on the scrotum, then that on the face, and, lastly, that on the trunk.

Zona.—According to M. Rayer, the acute inflammatory affection, which is called zona, is accompanied by two orders of phenomena; the one nervous, the other inflammatory,—the nervous one manifested by smarting pains in the situation where the eruption ought to be, but which often precede it for some days, and may be observed to follow the direction of the intercostal nerve. It may happen, however, that these nervous phenomena are only those of inflammation in an occult state.

Uterine Torticolis.—As a consequence of partial metro-peritonitis, the uterus sometimes acquires adhesions, which fix its base laterally to the right or the left, and thus give it a strong inclination. Its neck may then be seen twisted to the opposite side in the vagina, in such a manner, that there is a difficulty in discovering the *os tincæ* with the speculum, and from its vicious inclination, it cannot be embraced by the instrument. This condition, which we have observed several times, we denominate uterine, torticolis. If very prominent it constitutes an obstacle to conception.—*Ibid, from Annales de Therapeutique.*

Researches on the Neuralgiæ treated by Quinine and its Preparations. By Dr. Hermel.—The numerous cases observed by M. Hermel have led him to the following conclusions:

1. There are essential or idiopathic neuralgias which effect the intermittent or remittent type. These neuralgias are treated with success by quinine and its preparations.

2. There are neuralgias which appear with a febrile action, and either follow rigors or flushings of heat, and which are analogous to one of the stages of intermittent fever. These, like the preceding, are also cured by the employment of the antiperiodic specific.

3. There are diseases which present a greater or less number of

different affections during their course. Such are gout and scrofula. When one of these sympathetic affections has just disappeared, such for example, as hemorrhoids, and neuralgia appears, the best, and indeed the only method of curing it, even if it have the intermittent type, is to re-establish the affection by which it was preceded. These neuralgias do not require quinine.

4. In neuralgias with an intermittent type, which are symptomatic of a disease or an affection which does not present this type, quinine and its preparations may be employed, as an accessory, to combat the intermittent nervous pain if it persists.

5. We ought not to count on the modification of the first attacks after the first doses of the medicine, especially in the essential intermittent neuralgias.

6. Intermittent neuralgias, like fevers of a similar type, are liable to return. It is necessary, therefore, to continue the administration of quinine and its preparations, not only after the disappearance of all the symptoms, but during the period of about seven years (*septénaire.*)—*Ibid, from Gazette Médicale.*

Sulphate of Quinine in Large Doses, in Typhoid Fever. M. Paul Boucher de la ville Jossy has undertaken a series of investigations on the physiological and therapeutical action of the sulphate of quinine in large doses, in typhoid fever—a subject which has recently attracted much attention among French practitioners. The following are the conclusions which he thinks himself justified in forming, as the result of his own personal observations:—

1. The non-acid sulphate of quinine, in the dose of from two to four grammes in a mixture of 125 grammes, administered in spoonfuls by the mouth, every two hours or more, does not produce any serious consequences.

2. It is generally taken with repugnance; often immediately after having been admitted into the stomach, producing a temporary nausea, and sometimes vomiting.

3. The mucous membrane of the digestive passages does not experience from it any injurious influence; there is only some slight sensation of heat in the course of the œsophagus to the cardia.

4. The eruption of the lenticular spots of the skin and sudamina is not modified, and it appears to be the same also with the intestinal eruption.

5. Its administration is often followed by a remarkable amendment, which is sometimes only transitory.

6. The apparent convalescence is generally rapid, but it is not the same with confirmed convalescence.

7. This apparent convalescence is owing to the modification of the general condition; the intestines not partaking in this modification.

8. The nervous phenomena and the slowness of the circulation, which are caused by the quinine, soon cease when the administration of the medicine is suspended.

9. It diminishes the head-ache, and often causes it to disappear; the pain is then replaced by heaviness of the head.

10. It often hastens the return of natural sleep.

11. Finally, it does not appear that the sulphate of quinine should constitute a special method of treatment, but it may prove serviceable combined with other means.—*Prov. Med. and Surg. Journ. from Gaz. Méd. de Paris.*

New Compound of Chlorine, Iodine and Mercury, in Scrofula.—Mr. Rochard has communicated to the Académie des Sciences, Paris, a paper entitled "Trial of a New Compound of Chlorine, Iodine and Mercury, in the treatment of Scrofulous Affections."

The author reports a considerable number of cases, the results of which seem to him to prove that this composition, which M. Boutigni has made known, and designated by the name of "*iodhydrargirite de chlorure mercureux*," exercises an efficient action in scrofulous affections of the most serious character, and also in inveterate cutaneous diseases. He states that after having obtained some rapid cures in psoriasis lichen, chronic eczema, herpes, maculæ, &c., the idea occurred to him of extending its employment to the treatment of scrofula. He cites, amongst others, some successful cases of white swelling, with caries, and fistulous canals; of numerous enlarged indurated or ulcerated ganglia; of chronic ophthalmia, complicated with ulcerating keratitis; of ulcerated lupus; of goitre; and finally of large scrofulous abscesses, succeeding to an anti-syphilitic treatment. In these several cases the action of the remedy was quick and permanent, though varying in the various forms of the disease. M. Rochard employs the medicine externally in the form of ointment.—*Ibid.*

Mortality of Illegitimate Children.—The frequent occurrence of illegitimate births in the Prussian province of Posen, has induced Dr. Cohen v. Baren to institute some investigations as to the injury resulting in them to the children, from the mother being placed in an improper position at the time of birth, as compared with injuries from the same cause in married women. Of fifty cases, thirty were born while the mothers were standing, seventeen while stooping or sitting, and two while kneeling. Of the fifty women, thirty-two were primiparæ. Of the children, forty were at the full time, and ten premature; of these latter, seven were above thirty weeks of utero-gestation. Of the nineteen which were born while the mother was stooping, sitting, or kneeling, one had a fracture of the skull; it was probable, however, that this was caused by laying a heavy stone on the child's head, for it was dropped on soft turf; in ten of these not the slightest contusion or ecchymosis could be discovered, in one, probably from dragging the cord, which was much shortened from being several times twisted round the fœtus, there was rupture of the liver. In twenty-five cases the umbilical cord was torn; in seven the placenta came away along with the fœtus, the cord being

untorn; in fifteen the cord remained uninjured; and in three this point could not be determined. In the twenty-five cases, where the cord was torn through, eleven children presented ecchymosis, five fractures or fissures of the cranial bones, and one rupture of the liver. The conclusions from these investigations, compared with those which Henke gave in his critique on Klein's cases, are as follows:— 1st. The proposition that the fall of children on the ground can cause dangerous injuries, and through these death, is proved; and although it must be regarded in general, as only an occasional cause of death, still cases are not wanting where injuries received in this way have been the sole and only cause. In illegitimate children, too, a trifling injury is of greater importance than in children born in wedlock, and may be the cause of their death. 2d. It is proved that the fall is not invariably followed by death, as many children have fallen without receiving the slightest injury. 3d. That if unexpected protrusion of the child is frequent in persons who do not conceal their pregnancy, it is much more frequent in those who do. 4th. In unmarried females, it occurs chiefly in primiparæ. 5th. The assumption, that unmarried females being generally long in labour, the injuries observed on the fœtal head are to be attributed to its long detention in the pelvis, is correct in a very few instances. 6th. The unusual conditions in which women who bear illegitimate children bring forth, cause that very slight contusions, concussions, and extravasations, arising from the parturient process, may be followed by death, and therefore the medical jurist ought to be very careful in attributing such traces of injury (even though very considerable,) to violence intentionally applied. 7th. Of four children born in an unusual position, in three it can be affirmed that the cord was broken by the act of parturition itself. 8th. Injuries of the head are to be ascribed to the fall, more especially where the ground is hard, rather than where it is soft. 9th. The integrity of the cord is an obvious prevention to the production of injuries of the head; and where injuries are met with under such circumstances, we must rather suspect that they were induced by violence, applied in some other way. 10th. In delivery, in an unusual position, the cord is generally torn; it is seldom that the fœtus remains in connection with the placenta in the uterus, and still more seldom that both come away together with the cord entire. 11th. Illegitimate children show a less degree of physical development.—*Ibid, from Preussische Verein Zeitung*, in *Northern Journal of Medicine.*

Mesmerism.—From a letter published in a Dublin paper, it appears that the £100 note deposited for six months in the bank of Messrs. Ball and Co., which was, according to the terms of the advertisement in the public papers, "to become the property of any person who, without opening the envelope in which it was contained, should describe every particular respecting the note—such as its number, its date, the bank at which it was payable, &c., and who should read three English words, plainly written on a slip of paper, which was

contained in the same envelope with the note," has not been awarded. The six months expired on the 31st March, but the time was extended to the 18th of April, to meet the convenience of a lady, a professor of mesmerism, and the authoress of an ingenious book on the subject, who arrived from London in the beginning of the month, and who expressed a wish to have some time longer to prepare her *clairvoyance* for the test. Six months and seventeen days having expired, and no person having appeared at the bank to examine the envelope, it was opened on the 18th instant, in the presence of Messrs. Ball and Doyne, and one or two other persons connected with the establishment. The note proved to be a printed cheque issued by the house of Messrs. Ball and Co. for £100, payable to Œdipus or bearer, and dated the 1st of October, 1845. The English words (written on a separate slip of paper) were, "To Œdipus alone." Although no person applied at the bank to inspect the envelope containing the note, some communications were received from different parts of England, and one from America, (but none from Ireland,) containing mesmeric revelations respecting the number of the note; and one letter (from Plymouth,) enclosed a picture, or (intended) *fac simile* of it. It is unnecessary to add, that these mesmerically-inspired persons were mistaken in every particular.—*Prov. Med. and Surg. Journ.*

Calculi of the Prostate Gland.—A discussion which occurred recently at the "Societé de Chirurgie," on prostatic calculi, and which is reported by the *Gazette des Hôpitaux*, elicited the following remarks on the subject:—

M. Lenoir stated that a patient, fifty-five years of age, had been addressed to him by a provincial surgeon, under the impression that he was labouring under vesical calculus. On introducing the sound, he found an obstacle which gave a clear sound, and which he thought was a vesical calculus, but on examining digitally by the rectum, he failed to recognise its presence. On exerçising pressure, however, on the prostate, he caused the escape of about fifteen small calculi. They were of a dark yellow colour, and presented facet surfaces; burnt, they gave a decided animal odour. The patient, who, when he entered the hospital, had all the symptoms of serious vesical catarrh, left nearly well. A few months later, he was again sent to Paris, under the idea that he was labouring from vesical calculus, and a number of small stones were again emitted, by pressure of the prostate. Vesical catarrh was present, as on the first occasion. M. Lenoir thought that the calculi were formed in the ejaculatory ducts, and that it was because they occupied the orifice, that these produced, when touched with the sound, the sensation of a stone in the bladder.

M. Nelaton had met with a case at the Hotel Dieu, similar to the one of M. Lenoir. The friction of the sound over a hard substance in the region of the prostate had led him to recognise the presence of prostatic calculi. He managed to withdraw several by means of lithotritic instruments, and the patient left apparently cured. Two

months afterwards he returned with the same symptoms, indicating prostatic calculi, and, in addition, with a vesical calculus. He was not able to lay hold of the latter, in order to crush it, and was obliged to perform the operation of lithotomy. On scratching the surface of the incised prostate with his nail, he managed to make several calculi fall, similar to those described by M. Lenoir. The patient was cured. M. Michon, M. Guersant, and M. Laugier, thought that prostatic calculi were not rare; M. Malgaigne was of a contrary opinion.—*London Lancet.*

Case of Pelvic Abscess opened through the Rectum. By M. Amussat. Related by Dr. Compérat.—The subject of the case was a lady, 37 years of age, who had borne two children. She had enjoyed excellent health until 10 years since, when her husband infected her with gonorrhœa, from the secondary effects of which she suffered and recovered; a severe lumbar pain, however, then making its appearance, and continuing to annoy her at intervals. During the last 18 months this pain had increased in severity, and when first seen, 4th April, 1844, by Dr. Compérat, it had become very intense, occupying all the right side of the abdomen and genital organs. We need not pursue the detail of her sufferings, and of the measures which partially relieved them; but may observe that, by a recto-vaginal examination, a tumefaction was felt on the posterior part of the right side of the body of the uterus, seeming to be seated exactly at the recto-vaginal partition. Passing the index-finger high up into the rectum, its pulp was just able to reach the projecting part of another large swelling at the right posterior portion of the gut. All the parts were hot and irritable, and the examination gave excruciating pain. MM. Amussat and Fouquier saw the case, and believed it to be one of abscess, which the great constitutional irritation would seem to indicate, although they could not detect fluctuation, which Dr. C. believed he had felt. As the point of the finger could only just reach the swelling, the surgeons wished to defer opening it, and ordered cataplasms, the simultaneous injection of the rectum and vagina with emollients, and other palliatives. On the 19th, fluctuation had become distinct, and as the patient's general condition was now truly alarming, they determined to operate. M. Amussat having passed his finger into the rectum as high as the fluctuating tumour, slid along its palmar aspect a pair of very sharp-pointed scissors, very like those contained in dissecting cases, but having the backs of the blades rounded and the branches very much longer. The puncture was made and the blades then separated, so as to enlarge the aperture by tearing rather than cutting. During this period, an assistant pressed upon the belly, so as to project the tumour as far towards the rectum as possible. A lithotrity catheter was now substituted for the scissors, and guided along the finger, still left in the rectum. A considerable quantity of healthy, and scarcely sanguinolent pus flowed out. The cavity of the abscess was carefully injected with tepid water, and the rectum cleaned out, and the access

of air prevented by ascending douches of the same. These last gave great relief. In order to keep the aperture of the abscess patent, the index-finger was introduced several times during the first day. The next day, however, it had nearly closed, and the finger could not pass through the thickness of the walls of the abscess, which M. Amussat had observed seemed like cutting into the substance of the uterus itself. He enlarged the opening by means of a longer and stronger pair of scissors, the blades of which were notched near their extremities, so as to give the instrument a lance form, and prevent its escaping during the attempt at enlarging the wound. The edges were kept separate by occasionally expanding them by means of a *brise-pierre*. The case eventually did very well.

Dr. Compérat observes that, although numerous cases of abscess forming in the cavity of the pelvis are on record, (M. Bourdon gives an account of 23 of these in his paper "on fluctuating abscesses of the pelvis, and their discharge by an aperture practised in the vagina," in the *Rev. Medicale*, 1841,) yet the present, as far as he knows, is the first case in which an opening has been made for the evacuation of the pus by the rectum. The surgical procedure in each case must depend upon the direction which the projecting portion of the swelling takes. Of course, the difficulties to be surmounted are less in the vaginal incision. One of these, the danger of *hæmorrhage*, was met in this case by using very pointed scissors, first as a trocar, and then tearing, rather than cutting, the parts with them. The edges of the aperture also were effectually dilated by means of the *brise-pierre* as long as requisite. The introduction of instruments, however, at last induced severe *irritability of the anus*, which continued for hours, and caused the patient to dread its repetition beyond everything. M. *Recamier*, who saw the case, promised her, if she could bear very severe pain for a short period, to affectually relieve her.

"Having well oiled his fingers and thumb he formed them into the shape of a cone, and thrust them altogether through the anal ring, impressing upon the entire hand slight movements of supination and pronation in order to facilitate its introduction. The margin passed, the fingers were bent so as to increase the size of the imprisoned mass, and then drawing them out at once in this position, he forcibly dilated the sphincter, thereby causing excessive pain for some minutes. The anus spasmodically contracted during several hours, and then all became quiet. From this period, the sphincter offered no obstacle to the introduction of the finger and *brise-pierre*, and the patient suffered no pain whatever from it. I do not know whether M. R. has published his ingenious expedient; but all I can say is that, from the surprising manner in which it relieved the excessive sensibility of the anus and the anguish of the patient, it cannot be too strongly recommended in all cases where the permanent or frequent introduction of instruments irritates the sphincter."—*Med. Chir. Rev. from Revue Medicale.*

On the Submucous Division of the Sphincter in Affections of the Anus. By M. DEMARQUAY.—The division of the sphincter, as practised

by Boyer, frequently fails, and is not devoid of danger; but all its advantages may be obtained and inconveniences obviated by operating upon it beneath the mucous membrane. MM. Guerin, Velpeau, Blandin, and the author have employed this modification with great success, and it is the object of this paper to spread a wider knowledge of the proceeding by detailing several of the cases which have been treated by the two last.

Submucous myotomy is especially calculated for the relief of *spasmodic action and contraction of the sphincter ani.* It is often difficult to say where one of these affections ends and the other begins, for they are so intimately connected that the one may be said to be a consequence of the other: for if the same irritating causes which induce spasmodic contraction of the muscle continue in operation, this will then become permanent. When the contraction is well marked the anus seems deeper seated than ordinary, the borders of the external sphincter being seen projecting and the pleats of the region well-marked. If hæmorrhoids or mucous membrane has become engaged within the sphincter, the compression gives them a violet colour, and they may even become gangrenous. The finger is introduced with difficulty, and with pain to the patient, and is much constricted by the muscle.

Spasmodic contraction, requiring the operation, may manifest itself under various circumstances, but it is especially in its prevention of the *extraction of foreign bodies* from the rectum, that it comes under our notice. It may also manifest itself in two very important affections, viz., *prolapsus of the rectum* and the *sudden appearance of large hæmorrhoids.* In this last case, the constriction may be so considerable as to induce gangrene, or at all events prevent the return of the protruded parts.

Contraction of the sphincter plays an important part in three affections, viz., constipation, old hæmorrhoids, and fissure of the anus.

(1.) Prolonged and ostinate *constipation* not unfrequently gives rise to it. The indurated matters contained in the gut irritate it, and induce, first spasmodic and then more permanent, contraction; and authors have certainly sometimes mistaken the effect for the cause, in regarding the constipation as produeed by the contraction. In mentioning constipation as a cause of contraction, it is not intended to recommend combating it by a surgical operation. It is a complex condition of which this contraction only forms a portion.

(2.) When *hæmorrhoids* have long existed, and become frequently congested and inflamed, it is by no means rare to find contraction induced. In this case they are forced out at stool, but can only be partially returned. They inflame; defæcation becomes more and more difficult, and fissures and hæmorrhages result. Several examples are given in which this state of things are effectually relieved by the submucous section.

(3.) *Fissure of the Anus* is so intimately connected with contraction of the sphincter that Boyer regarded them as the same disease. But we have already seen contraction may exist without fissure, and the question is, when the two affections co-exist, which has preceded the

other. In the great majority of cases a more or less obstinate constipation, a state often giving rise to contraction, has preceded the fissure. Authors, however, have stated that they have observed fissure without contraction, and if they are correct we may explain such cases by the varieties of the disease admitted by M. Blandin. He states that the fissure may be seated above, opposite, or below the sphincter. In the last case it may exist without contraction.

The author has analysed all the cases of fissure of the anus which have been published, as far as he knows, since the time of Boyer. They amount to 53, of several of which very insufficient particulars are given. Of these persons, 30 were men and 23 women, in opposition to Boyer's assertion that females are most liable to the disease. In six instances the fissure was double, triple, or quadruple. The age is only recorded in 42 cases, the disease being most common between 20 and 30, and 30 and 40. In 26 of the cases constipation, and in six cases hæmorrhoids, are described as existing.

Seven cases of fissure operated upon by M. Blandin are given, in all of which complete and immediate relief succeeded to the most intense suffering. Prior to commencing the operation the rectum should be well-cleared out, so as to obviate the necessity of going to stool shortly after it. An assistant must raise the side of the buttocks opposite to that on which the section is about to be made. This last is always practised at one of the sides of the anus, so that the sphincter may be divided through its middle. An ordinary *tenotome* may be used, or a bistoury which M. Blandin has contrived. The former is, however, not long enough, and its point is not sufficiently guarded, so that there is danger of penetrating the mucous membrane with it. M. Blandin's bistoury is protected by a moveable sheath, and he can either use it for puncture or incision, or as a flattened probe, accordingly as he wishes to divide parts, or merely to pass it between the muscle and mucous membrane. Whichever may be selected, the operation is simple. 1. Make a small opening in the skin. 2. Introduce the finger into the rectum, at the same time that the skin on each side of the anus is stretched. 3. Pass the tenotome between the mucous membrane and the sphincter. 4. Divide the latter. The puncture of the skin is most conveniently made at from 8 to 12 lines from the anus. The instrument must be passed in very gently so as to detach parts as little as possible. When the division has been made a kind of crack is heard, and the finger which is in the rectum feels the space between the two divided portions of the muscle. Although not absolutely necessary, the patient had better keep his bed for a few days after; and he should live very abstemiously, as it is desirable he should not go to stool for three or four days, after which there is no fear of rupture of the cicatrix. Occasionally the section of the sphincter on one side only is insufficient. The fissure does not after the section of the muscle require any special treatment.

Ibid, from Archives Generales.

[When the dreadful and prolonged suffering incident to fissure of

the anus is considered, the substitution of this simple operation for that of Boyer's must be regarded as of one the most valuable applications of myotomy.—*Med. Chir. Rev.*]

Quinine in Acute Rheumatism.—Three years have elapsed since M. Briquet communicated the success which attended the use of quinine in cases of acute articular rheumatism at the Hôpital Cochin. Several practitioners have resorted to it with the same result: but its employment has become by no means general, partly in consequence of too large doses being given at first, and various accidents in consequence ensuing. M. Briquet formerly gave from 4 to 6 scruples in the 24 hours, but now gives but from 1 to 4, discontinuing it when any sign of prostration manifests itself. He employs the neutral salt rendered soluble by sulphuric acid. From the first or second night sleeplessness disappears, and a little later there is a more or less marked diminution of the pain and swelling of the joints. From the third to the sixth day the rheumatism may become cured; but when the cure is so prompt as this there is usually some return of pain, with or without swelling, again requiring the use of quinine. As a general rule the patients are cured or notably relieved from the ninth to the twelfth day of treatment.—*Ibid, from Gazette Medico-Chirurgicale.*

Fracture of the Lower End of the Fibula.—M. Robert recommends the following means of distinguishing this accident from a *sprain of the ankle-joint*, after waiting two or three days for the swelling to subside, if necessary. Apply one thumb upon the external malleolus, and the other over the supposed fracture, and transform the fibula into a lever, having its fulcrum at the inferior perineotibial articulation. A certain degree of pressure is to be exerted by the thumb on the malleolus externus. If the fibula is uninjured, its entire length is felt to slightly and uniformly bend under the pressure; but if there be a fracture, the lower fragment moves more or less, and projects under the finger, so that even its form may be distinguished. The fracture in these cases is almost always oblique from above downwards and from behind forwards, occurring at only a short distance from the ankle-joint.

M. R. observes that the fracture may thus always easily be detected, and is surprised the mode has not occurred to others. Dupuytren was not aware of it, but used to seize the leg with one hand and the foot with the other, which means will however only suffice to detect a fracture when situated at a considerable distance from the malleolus.—*Ibid, from Gazette des Hôpitaux.*

M. Duclos on Fissure of the Anus in Infants.—It is a generally received opinion, says M. Duclos, that fissure of the anus is not a disease to which infants are subject. M. Trousseau's experiments, however, at the Neckar Hospital, proves that such is not the case, and that infants, even during suckling, are liable to this distressing

disease, as well as adults. M. Duclos gives, in the *Journal de Chirurgie*, two cases, which occurred under M. Trousseau.

The first case is that of a little girl, one year old, under treatment for a white swelling of the knee. This child had been constipated from her birth, but more especially for the four previous months, the bowels being moved only every third or fourth day. Two months previous, the mother remarked that every time the bowels were opened the child screamed violently. The pain appeared to commence with the effort of defecation, to continue during the passage of the fæcal matter, and to be prolonged for a few seconds afterwards. For the last month, more especially, defecation had been exceedingly painful, and at each stool the child had voided a few drops of blood, either before or after the fæces, but never mixed with them. Sometimes the child, after a violent effort, would void a few drops of pure blood, scream violently, and make an effort as if to prevent the escape of fæces, in which case no stool took place. The general health was very good.

On examining the anus, the following was found to be the state of the parts:—The circumference of the anus was perfectly healthy, but on deeply separating the folds, at the anterior part and between two folds of skin, a fissure, a millimetre in width and about five millimetres in length, of a red colour, was distinctly perceived. It was the more clearly seen, as the child, screaming violently, protruded the anus. The constriction at the anus was so great that the extremity of the little finger could scarcely be introduced. M. Trousseau prescribed an enema, composed of extract of rhatany, one scruple; water, three ounces. The child kept the injection for five minutes, and returned it along with soft fæces. The injection was repeated daily for five days. Each time the passage of the fæces appeared less painful, and on the sixth day the injection was discontinued. The motions were then easy, free from blood or pus, and unaccompanied by pain. The child left the hospital ten days after, quite cured of the anal affection.

The second case occurred in M. Trousseau's private practice. The child, eight months of age, well developed, and in previous good health, had been suckled by the mother until the age of six months and a half. At that epoch, it was weaned, and was subsequently attacked with violent diarrhœa, which gave way under the use of emollients. The diarrhœa was followed by obstinate constipation. This state had existed for about eight days, when the child was seized, during defecation, by violent pain at the anus, and the fæces were found tinged with blood. From that time, the child suffered great pain on defecation, and for some minutes afterwards. The fæces were hard, and generally tinged with a few drops of blood. The child was constipated. General state satisfactory. On examining the anus, around its orifice there were found a little erythema and eczema, which had been occasioned by the diarrhœa, and were fast dying away. Behind, and to the left, on separating the folds of the anus, a fissure, about two millimetres in length and one in

depth, of a rosy colour, was discovered. It was very distinctly seen on the child's protruding the anus in an effort for defecation. The anus was considerably constricted.

The same treatment was adopted as in the former case, and with equal success. The fissure cicatrized completely in about ten days, all pain on the evacuation of the fæces disappearing.

In these cases, says M. Duclos, the fissures were perceptible to the eye; but the seat of the pain, the mode of its manifestation, and the slight hæmorrhage on defecation, could leave but little doubt in the mind of the observer as to the nature of the disease, even in the absence of ocular demonstration. The symptoms, however, do not, if we judge from these cases, present absolutely the same form as in adults. In adults, the pain is generally most severe during the first hours which follow the excretion of the fæcal matters. Often, indeed, it gradually increases for some time after the motion, until it attains an intolerable intensity. With the children whose cases are reported above, nothing similar occurred. The pain seemed to cease a few minutes after the escape of the fæces, only to reappear on the bowels being again moved. Nothing appeared to indicate the presence of the slightest pain after the excretion of the fæcal matter. It is difficult to account for the fact.

Another circumstance is worthy of notice—viz., the slight hæmorrhage which invariably accompanied each alvine evacuation. In adults, extensive and very painful fissures may exist, without there being the slightest loss of blood. M. Velpeau appears even to think that it is the general rule.

The rapidity with which these fissures were cured by the rhatany injections is worthy of notice. Is a rapid cure to be expected in all such cases with young infants under similar treatment?—*London Lancet.*

Clinical Lecture—Intestinal Obstructions. By Professor Chomel.—A patient recently died in our wards (Hotel Dieu) from the presence of intestinal obstruction. She was a woman aged nineteen, of a strong constitution, and enjoying usually good health. Six months before her death she miscarried, and presented afterwards all the symptoms of peritonitis. It was impossible, on inspection of the preparation, to doubt that the inflammatory symptoms originated on the surface of the womb. It is, gentlemen, a remark we have often had an opportunity of making, that no disease is more rare than primary spontaneous peritonitis; when, therefore, you are called to a case of inflammation of the peritoneum, you should first endeavour to ascertain by what disease it has been produced, and in the detection of this primary malady you may find the most urgent practical indications. Our patient had, therefore, been affected with peritonitis consequent upon inflammation of the uterus after miscarriage. These symptoms had subsided, when, about a fortnight before death, new pains appeared in the abdomen, attended with frequent, almost continuous, vomiting. When she was admitted into hospital the extremities were cya-

nosed, the pulse 120. The vomiting continual, and the peristaltic motion of the intestines visible through the abdominal walls. The belly was not meteoric, and the matter vomited, at first of a bilious nature, soon acquired a fæcal odour, and left no doubt of the presence of an obstruction in the course of the intestines. Various purgatives were unsuccessfully exhibited, and the patient lived only forty-eight hours after admission into our wards. On dissection, the omentum was found to adhere at one point to the inner surface of the pelvis, and marks of inflammation were readily detected all over the serous membrane. In the hypogastric region solid adhesions were discovered; the first seven feet of the small intestine were in a state of considerable dilatation, equalling in size the large intestine. The digestive tube was, on the contrary, atrophied from the union of its two superior with its inferior third, and was much narrower than in health. In the exact spot where the exaggerated dilatation of the intestine ceased, the ileum was strictured by a portion of intestine lying across it, and firmly attached by one of its extremities to the brim of the pelvis, and by the other to the omentum. The occlusion occupied the left side, and above it the small intestine was half twisted on its axis. In several other parts of the pelvis peritoneal adhesions seemed also to interfere more or less with the circulation of matter in the cavity of the digestive organs, the lower parts of which contained neither gas nor stercora : above the stricture was accumulated a large quantity of liquids. We found also an ulceration of the rectum, which does not seem to have any connection with the causes of death; the womb was healthy.

The disease of which this poor woman presented an example has been but imperfectly studied. The names of ileus, volvulus, meserere, iliac passion, &c. have been generally employed to designate it, In the description of a disease it is not our custom to begin with the anatomical alteration; it appears to us more rational to investigate first the causes, symptoms, progress, and treatment of a disease, before entering upon the examination of the physical changes it has produced ; but, in the description of some maladies, we are forcibly obliged to modify this general rule, because the anatomical alteration is the chief point—the important feature, without a correct knowledge of which no insight into the nature of the disease can possibly be obtained.

Morbid Anatomy.—The anatomical cause of obstruction will be found occasionally to reside in the intestinal cavity, in the walls of the digestive tube, or in some neighbouring organs. Thus we find that strangulation may be caused by epiploic adhesions situated in any part of the abdominal cavity. The appendices of the omentum, the appendix vermiformis, occasionally incarcerate a portion of intestine, and we have seen in the melancholy case which we related at the beginning of this lecture, that an intestinal convolution may press like a ring against another part of the tube, and obliterate its cavity. It is not impossible that strangulation of a portion of intestine may take place through a laceration of the diaphragm, and lacerations of

the omentum or mesentery have been observed to give passage to and to strangulate a convolution of the ileum or jejunum. Another form of intestinal obstruction, *intussusception*, is not unfrequently observed; not that intussusception is always followed by fatal symptoms. A portion of the small intestine may accidentally be invaginated in the neighbouring part of the digestive canal without the production of any severe accidents, particularly in children. You will often find in them intussusception to be merely a cadaveric alteration, or to have been produced during the last moments of life. But the most dangerous of all forms of intussusception is undoubtedly the reception of the small into the large intestine. The immobility of the colon, and the presence of the ileo-cœcal valve, render constriction inevitable, and its consequences more dangerous. We should also say that if this is the severest, it is also the least frequent form of invagination. The obstacle once established, fæcal matter cannot pass onwards; the venous circulation of the part is arrested, and symptoms of inflammation appear. The intestine may also be completely twisted round, so as to be completely impervious in one spot. This is an uncommon sort of obstruction; but has been observed in several instances, and in one case in particular, related by M. Andral, the entire mass of the small intestine was twisted by a universal movement of rotation, so as to present an insurmountable obstacle to the progress of its contents.—*Lond. Med. Times.*

Case of Fistulous Abscess of the Liver, communicating with the gall-bladder; dilatation and cauterisation of the fistulous canal; extraction of sixteen biliary calculi; cure. By Doctor Levacher.—Cases of abscess of the liver opening externally and giving passage to biliary calculi are not very frequent in medicine; Boyer notices one related by Borrichius, in which there were more than four hundred calculi passed. Breschet in his article Calculus in the 'Dictionnaire de Medecine' gives two others reported by Thilésius and Stalpart Van-der Wiel; Thilésius says that in a case of abscess of the liver there came away in the course of nine years, five or six hundred small stones; and Stalpart Van-der-Wiel mentions the passage in this way of one calculus of the size of a pigeon's egg. In speaking on this subject I would refer the reader to the excellent memoir of J. L. Petit on tumors of the gall-bladder and abscesses of the kind I have mentioned. He has given rules for their treatment, and has established them by a large number of cases. It is always much to be regretted that the reports are deficient in necessary details; that which I am about to relate, besides being very full and complete, will be found interesting I hope both from the description of the treatment made use of and from the perfect and continued cure.

In April 1838 I was called to attend a lady, Mrs. J. —— from Tulle in the department of Corrèze, residing in the rue de Boucher, No. 3.

She was 23 years of age, of a light florid complexion, rather tall, and quite fleshy, and appeared at first sight to enjoy perfect health. She

told me that three years before, in consequence of a violent blow on the right side, she had experienced at first a continued pain accompanied with chills and fever; this was followed by stitches, and at last, after suffering for more than a month, an abscess formed, which opened spontaneously, and was pronounced by the physician of the place to be an abscess of the liver. The cure of this abscess had been very tedious, and a purulent exudation lasted for more than two months. I could learn nothing from the patient about the character of the pus. For the last two or three months she had experienced anew the lancinating pain in the right side accompanied with a slight attack of fever;—in consequence of this relapse, which was much less painful than the primitive accident, she noticed a small abscess below the cicatrice of the former one; this soon opened, and a clear pus wept from it; and being very much annoyed by her condition, she left Tulle and came to Paris to obtain if possible a cure.

On placing the patient in bed on her back, I found her pelvis and abdomen both of unusual size; the cellular tissue was likewise well developed. Near the linea alba on the right side, and three fingers breadth below the umbilicus, was a fistulous orifice. The deep star-shaped cicatrice of the old abscess was to be seen at about two fingers breadth above and to the right of the umbilicus; this cicatrice seemed to show, by its distance from the liver, that the old abscess had spread of itself and opened externally by a canal which had become fistulous.

The quantity of fat in the abdominal walls did not allow a close examination of the liver, but to the touch it appeared to be somewhat hypertrophied; palpation and percussion produced no acute pain but an unpleasant feeling; at the two superior thirds of the organ, the sounds were mat, but above that they were natural; the false ribs could be easily detached by pressure, and there was evidently no adhesion with the diaphragm.

Her bowels were regularly moved and the stools natural; the urine was in good condition; there was no fever, and all the functions were well carried on.

A sero-purulent discharge took place on pressure over the fistulous canal. Into this canal I passed a grooved director, which followed it without any difficulty in a transverse direction for about four inches and then suddenly stopped: here there was evidently a sudden turn in the canal, as we shall see hereafter. I divided the tissues immediately on the director up to the point where it was stopped; a suitable dressing was then applied. After some days I found that the canal still existed; I passed the director again, and now it went from below upwards by the side of the old cicatrice, and after some difficulties at this point it continued a little further. I laid open the canal again up to this last point; and here some sinuosities which interfered with the passage of the director were destroyed. The instrument then passed freely for one or two inches in the direction of the superior part of the liver towards the epigastrium and there stopped. The extremity of the director was free, and could be moved in various

directions, on doing which a very distinct crepitation could be perceived, and it seemed as though it was touching a chalky substance, rather than a resisting calculus.

On account of this fact, which seemed to me a serious one, I desired a consultation and called in one of our clinical professors of surgery. The professor examined the patient, sounded the fistula, and thought there was no affection of the liver, but that the director passed into the interior of a deep old abscess, whose position could not be positively determined; he thought that the crepitation which was felt with the director came from old calcareous deposits in the sac, as is sometimes the case. He agreed with me that the fistula should be kept open and gradually dilated by the aid of sponges properly prepared. His prognosis was more unfavourable than mine, because I thought a cure very possible. He was of opinion that notwithstanding the excellent health of the patient, serious accidents would soon come on, and told me, and the husband also, that he considered the case to be necessarily a fatal one sooner or later.

I asked of the husband a new consultation of several surgeons, either together or separately, but my request was denied. They would not hear of a consultation, and the patient was put wholly under my care, with the assurance, that whatever might be the result, they would be thankful for my attentions.

I placed the patient under a treatment both general and local. I advised perfect rest in bed, and put her on a low diet, such as is suitable in affections of the liver. She took, as occasion required, whole or partial tepid baths, enemata, &c. Perfect freedom of the bowels was kept up by gentle laxatives, and her drinks were diluent and cooling.

I commenced a gradual dilatation of the canal by means of sponges, prepared by wetting them with a solution of gum and then compressing them until dry. I succeeded with some difficulty, by means of the sponges and cauterizations, in enlarging the whole canal to the size of my little finger, but notwithstanding this the sponges were always firmly grasped, especially by that part of the canal corresponding with the entrance into the peritoneum; at this point there was a sort of neck on which the sponges had but little effect; they were repeatedly torn, and it was with great difficulty that I removed the fragments, which was done by means of small straight forceps.

With this degree of dilatation I could distinctly perceive the existence of calculi by means of a sound; these could only be distinguished to the right and left, no sound being given immediately at the bottom of the opening. I had arrived at this stage of the treatment, when, on removing the sponge one day, a blackish calculus with facettes, and of the size of a pea, escaped, then came a gush of green bile, and again two other calculi of the same size.

I introduced the sound and still found nothing immediately before the instrument, but to the right and to the left there existed, very evidently, a calculous body, resisting, and of a much greater size than those which had been passed. It was impossible to determine whether

there were two bodies or one, even when I made use of the female catheter, which is curved at its extremity.

The general health of the patient continued good; all the functions were well carried on; her sleep was excellent, and she merely suffered a slight pain in the region of the upper part of the liver.

Finding that it was necessary to increase the dilatation to double the size I had already obtained, I had recourse to catgut strings. I had some prepared of the size of the little finger, of the ring finger and of the index; these I expected would become one-third larger by remaining in the fistulous canal for twelve hours, where they would absorb the moisture of the parts. This method of treatment answered very well, and at each dressing a small quantity of bile escaped, and now and then a small calculus. At the end of five or six days the dilatation was equal in size to the thumb, and fourteen calculi, all of the same size, had been passed.

I had kept up the dilatation to the same extent for some days without any more calculi being passed, when one day, on passing the sound, I found a large calculus engaged in the commencement of the canal. I increased the dilatation somewhat so as to facilitate its passage, and the next day but one it had advanced two-thirds of the distance--on the fourth day it was retained by nothing but the neck caused by the peritoneum, which still existed. I now undertook its removal with a pair of straight polypus forceps: by carefully introducing them, first shut, then gradually opened, I succeeded in seizing the calculus, and tried to extract it, but the resistance of the neck prevented me until it broke into three or four pieces. I then carefully removed these with a pair of small forceps. On reuniting the fragments I formed a calculus of about the size and form of a pigeon's egg, and what is very remarkable, it had no facettes, neither was its color, which was of a brownish yellow, the same as that of the small calculi: its internal structure, however, was the same. It was composed of crystallised biliary adipocire, known under the name of cholesterine. The sound, on being introduced, gave no signs of calculus on the left side, but there still existed the same sensations on the right.

Three or four days after, another calculus presented itself and came away just as the former; it was broken into several portions, which, when put together, were of the same size and form as the preceding.

From the moment these two calculi were passed, the patient experienced perfect relief. I kept up the same degree of dilatation for a week longer, but not finding during this time any calculus with the sound, I began to use smaller cords. In a few days the canal had diminished to the size of a large goose-quill; there was no more passage of bile, the patient's appetite and strength increased, her *embonpoint*, which she had lost somewhat, returned, and she wished to get up, and thought she could easily take a walk.

I thought it advisable to keep up some degree of dilatation two weeks longer, and several times cauterised the canal with a piece of catgut slightly soaked in a solution of lunar caustic. I allowed my patient to leave her bed and lie on a sofa during the day, and at the

end of the two weeks finding no signs of calculus with the sound, I gradually lessened the dilatation.

During this time I applied frictions over the region of the liver with mercurial ointment, and afterwards covered the part with mild poultices. I recommended to the patient the use of the *eau de Vichy* internally, and of flannel for covering. I soon left the wound to itself, and in a few days cicatrization was completed. Three months had now elapsed since the patient was placed under my charge.

This case occurred, as I have before mentioned, in the year 1838, last year, 1844, I had the pleasure of seeing Mrs. J——, who lives now in Paris; her cure is perfect. Since her treatment she has enjoyed uninterrupted health, and has never suffered the east colic, or anything indicating a calculus affection of the liver.—*Journal de Chirugie.*

Contraction of the Prepuce.—At the Medical Soicety of London, Dr. Golding Bird alluded to a case occasionally occurring in practice, but, he believed, not mentioned in any printed work. Last Friday week, among the out-patients at Guy's, was a little child, seven or eight weeks old, lying in a state apparently comatose. The mother stated that the child had been heavy and stupid ever since its birth, and the last few days more particularly so. It fell into a lifeless state immediately after sucking from the bottle from which it was fed. The first suspicion on his mind was, that the child had taken an opiate, but this was denied by the mother, and he believed her. On opening the eyelids, the pupils were observed to act lazily, and they contracted feebly. No blow or any kind of injury had been received, If not the result of an opiate, on what did the symptoms depend? The head was not large enough to raise the suspicion of congenital hydrocephalus; nor had any symptom been presented of the acute form of that disease. On inquiring if the child passed water, the answer led to an examination of the prepuce, which was found to be elongated, and had an aperture only of the size of a pin-hole, like a puncture in the intestine. The urine was dribbling out; it was evident that the child had never completely emptied the bladder. Mr. Hilton slit up the prepuce, and all the symptoms were immediately relieved, and soon entirely removed. Dr. Bird referred to a case which he had related to the Society some years since,—and which was reported in the Lancet at the time,—of a child who fell a victim to a malformation of this kind; and after death the bladder and ureter were found like those of a man who had long suffered from stricture.

Mr. Linnecar had lately attended a gentleman with gonorrhœa, who had only a pin-like opening in the prepuce, the meatus being, however, of the natural size. This gentleman was always three-quarters of an hour in evacuating his bladder. During the efforts of micturition, the prepuce filled up like an apple.

Mr. Hilton had seen many cases similar to the one mentioned by Dr. Bird. The greatest benefit resulted from slitting up the prepuce. In this case the benefit was very remarkable, a partial paralysis of

the left side, under which the little patient laboured, being quite removed in twenty-four hours.

Mr. Bransby Cooper said that it was a remark of the late Sir Astley Cooper, that it was a matter of great importance to open the prepuce in these cases of obstructed micturition; for every case of cancer which had come under the notice of that distinguished surgeon, had been associated with the condition of the prepuce alluded to. Sir Astley preferred circumcision of the prepuce to slitting it up. The fresh accumulation behind the prepuce set up inflammatory action, which, being long continued, was liable to lead to the production of cancer. —*London Lancet.*

Bread without Fermentation. By W. B. Herapath.

Having seen in the last week's *Lancet* an advertisement relating to the newly-invented process for the manufacture of bread without the aid of yeast or any other fermenting substance, perhaps I might me permitted to call the attention of the medical profession (and especially of that portion practising in our colonies) to this subject, by making a few remarks upon the process, and the numerous advantages it offers over that generally adopted.

From the influence which temperature has upon fermentation, great difficulty is constantly found in obtaining good yeast in tropical climates; and in long maritime voyages, other circumstances conspire to render this obstacle so insurmountable, that, after having fruitlessly tried numerous expedients, the attempt to obtain fresh bread has been almost given up in despair. The natives of our Indian colonies have either been driven to eat bread sour from the moment when it has been drawn from the oven, or to choose an equally disagreeable alternative, to digest dry, heavy and unwholesome biscuits. Fresh bread is a luxury equally unknown to the mariner and the colonist; consequently, the method now before us will prove an invaluable boon to both parties, as it will enable them to procure 'the staff of life' almost at a moment's warning.

Before entering upon the discussion of the improved process, perhaps it will be advisable to make a few remarks upon the theory of the ordinary method of 'rising the dough.' Your readers are of course aware that the essential ingredients for the manufacture of bread have hitherto been flour, water, and some substance capable of inducing fermentation. Yeast is commonly used, which consists of an immense quantity of peculiarly organized vegetable cells, having extraordinary powers of reproduction when placed in circumstances favourable to their development. Saccharine solutions, kept at a proper temperature, permit these cells to germinate rapidly, and during their growth, the sugar is converted into alcohol and carbonic acid gas, the latter of which is evolved in large quantities. Flour contains a certain proportion of sugar, which, therefore, in the manufacture of dough, becomes converted into spirit of wine, and the carbonic acid gas, during its escape in bubbles, inflates and lightens the dough, by separating its par-

ticles farther from each other; and then during baking, the dough is dried sufficiently for it to retain this porous form, after all gas has escaped.

Any other substance capable of eliminating gas would be equally efficacious in 'rising the dough,' as the porosity of bread simply depends upon the mechanical effect of the bubbles of gas upon the dough previously to baking.

The method adopted by the patentee of the 'prepared flour,' therefore, has this object in view—viz., to evolve by chemical decomposition, during the wetting of the flour, a sufficient quantity of carbonic acid gas to render the dough spongy, light, and elastic, so that the bread might be made porous, palatable, and digestible. He has perfectly succeeded in his object, and at the same time done so without communicating to the bread any flavour likely to excite the criticism of the most gastronomic individual; the articles introduced are so small in quantity, and so perfectly harmless in their physiological properties, that no one can ever object to make use of an article thus prepared. Some time ago he kindly permitted me to inspect his apparatus, and the whole process of preparing the flour, making the dough, and baking the bread upon this principle, and I can safely say, that I have never witnessed any operation in domestic economy so beautifully simple and efficacious. A few minutes suffice to mix the necessary ingredients with the flour, and then, simply by stirring up a little water with this mixture, and kneading the mass for a short time, it becomes dough, as spongy and elastic as if twelve hours had been consumed in its manufacture by the old method; in another hour it is drawn from the oven as a loaf equal to anything ever produced by the finest and sweetest yeast. It is not necessary that the ingredients should be mixed with the flour immediately before the bread is to be made; flour thus prepared might be kept in store for months, or years even, without undergoing more change than any other meal would under similar circumstances. I have eaten a loaf made from flour thus prepared eight months ago, and can testify to its sweetness and perfect flavour. Bread thus made has been kept for months without showing any sign of mouldiness or decay; it hardens and becomes dry, but continues sweet to the last.

It will be at once seen, from the simplicity of the process, that we are now perfectly independent of fermentation, and consequently of all the disadvantages attendant upon changes in temperature; for whether we desire to obtain bread in the depth of winter, or during the greatest heats of summer, in the polar regions, or in the torrid zone, our food will be as readily made, and as light and spongy, as if produced under the most advantageous circumstances, according to the ordinary process.—*Ibid.*

University of Edinburgh.—Mr. John Goodsir, the well-known anatomist and microscopist, has been elected the Professor of Anatomy in this university.—*Ibid*